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ABSTRACT

Research was conducted to evaluate the effects of the College Discovery Program (a program designed to facilitate higher education for underachieving, financially impoverished high school graduates) on the 1965 class. The report deals with the problem of attrition from the program and the probable effects of the college experience on students. The authors investigated the students' financial sources while in the College Discovery Program and noted the students' reactions, attitudes and perceptions of the overall program. Study habits of the students, peer culture and the students' assessments of the effects of the college experience are also explored. Lastly, the study includes recommendations for program planning and research implications of the findings. (Author/MC)

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A FOLLOW-UP STUDY OF
THE EXPERIENCES AND REACTIONS OF STUDENTS
IN THE
1965 ENTERING CLASS OF THE COLLEGE DISCOVERY PROGRAM

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Since the inception of the College Discovery Program in 1964, research has been conducted to evaluate the effects of the program. The present report is another of a continuous series of follow-up studies by the Research and Evaluation Unit and provides essential data which we hope will be useful for program planning and improvement.

To conduct research of the nature and scope of this study requires the assistance and support of many people. We are indebted to Chancellor Bowker for providing the opportunity to conduct the research. We are also grateful to Dean Joseph Shenker and to Dr. Leonard T. Kreisman, Director of the College Discovery Program, for their continued support. Dr. Walter Reichman and Howard S. Tillis provided useful and constructive criticism. We also thank all other members of the research staff whose efforts contributed to the final product. Finally a word of thanks is due to the College Discovery students who took the time to complete the questionnaires. The information supplied by the students is the primary data upon which this report is based.

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HIGHLIGHTS OF FINDINGS

In the spring of 1967, a two year follow-up study was made of the 529 students who had entered the College Discovery Program in 1965. Questionnaires designed to elicit the students' attitudes and perceptions of their college experiences were administered to two groups of students in the class:

Survivors (N=305): Those who were still enrolled in the program as of Spring, 1967.

Dropouts (N=224): Those who had entered the program, but subsequently left.

Questionnaires were returned by 78% (N=238) of the survivors and by 77% (N=172) of the dropouts.

Major Findings

1. At the time of the follow-up study, 43% of the 529 students who had entered the College Discovery Program had dropped out, a slightly lower rate than that for the 1964 class in the same time period.
2. Withdrawal rates differed among community colleges.

The highest withdrawal rates occurred at Bronx and Queensborough (the colleges with one year of experience in the program), where slightly more than one half of the students left the program. The lowest rate (27%) occurred at New York City Community College, which follows a very liberal grading policy.

3. Comparison of the withdrawal rate of CDP students to that of other community college students indicated that the overall withdrawal rate of the 1965 class (43%) was very similar to the overall rate for students at 23 California Junior Colleges (42%), where an open enrollment admission policy is followed. At New York City Community College, the percentage of CDP students enrolled for the Spring 1968 semester who withdrew (15%) by the end of the same semester was very similar to that of non-CDP students (11%). But at Bronx Community College, the withdrawal rate of CDP students in the 1965 class (53%) was much higher than that of non-CDP students (34%). Comparable data on withdrawal rates was not available for other CUNY community colleges.

4. Among students who had left the program, one-third were attending some kind of school at the time of the study, 42% were working, and 16% were in military service. Most of those enrolled in school were attending evening sessions at two year colleges.

5. Survivors did not differ from dropouts on most of the demographic characteristics; ethnicity, sex and curriculum were similar in both groups. The student's marital status and parental presence in the household did differ significantly between the two groups. More dropouts than survivors were married and lived with people other than the parents; however these differences generally reflected developments in the life circumstances of the dropouts after leaving the program.

6. Vocational and educational aspirations were very high among the two groups of students, particularly among survivors. Both groups of students generally aspired to professional occupations requiring graduate degrees. Seventy per cent of the dropouts and 93% of the survivors planned to resume or continue their education the following year.

7. Among students who left the program, eight out of ten felt that they really wanted to stay in college.

8. A substantial majority of students in each group experienced difficulties while in the College Discovery Program. The major difficulties mentioned by both groups were study problems, personal and family problems and financial difficulties. Dropouts, however, were more likely to experience these difficulties than survivors.

9. Among dropouts, the major reasons for leaving the program were personal and family problems, financial difficulties, and dissatisfaction with curriculum. Survivors, on the other hand, felt that personal perseverance was the main factor that had enabled them to stay in college.

10. Dropouts were less likely to utilize college facilities than survivors. Facilities least utilized by dropouts were: tutoring services; CDP stipends; facilities for getting to know CD students, non-CD students and teachers; the student activities program; the library; and the college study space. The one facility which was utilized by almost every student in the two groups was the guidance and counseling service.

11. Among students who utilized the tutoring service, dropouts received tutoring in more subjects and also received many more hours of tutoring than survivors. These findings suggest that besides personal and family problems, the academic problems of dropouts were more extensive than those of survivors.

12. Both groups of students expressed favorable attitudes toward CDP, but this feeling was more pronounced among survivors.

13. The majority of students in each group generally considered the college facilities to be adequate. A considerable number of survivors, however, rated the college library and the college study space as inadequate. This finding deserves further study since one of the major difficulties experienced by students was study problems, including the lack of a suitable place to study.

14. Although 80% of the students in each group rated the summer program as at least adequate, only 50% felt that the summer courses had prepared them for college. Over two-thirds of the students in

each group felt the need for more remedial summer courses in English composition, grammar, mathematics, and reading.

15. Attitudes toward guidance and counseling service were generally favorable. But a sizeable proportion of dropout students felt that talking to the counselors did not help them, and that the counselors did not understand their problems.

16. Among the major differences between the two groups of students was the amount of time spent studying. Dropouts studied fewer hours per week and realized that they were studying less than other students.

17. Proportions of study time spent in different locations varied between survivors and dropouts. Although both groups mentioned home as the most commonly used place of study, significantly more survivors studied at home. More survivors also studied at public libraries. Dropouts were more likely to study in the college study space or in the lounge.

18. The two groups of students did not differ in the values which they regarded as important. Their careers and occupations, their self-development, and relationships with their families were generally considered as very important. Little emphasis was placed on the importance of community affairs, and national or international improvement.

19. The two groups of students differed in the amount of time they spent in various leisure time activities after entering college. Dropouts were likely to spend more time in the following activities: reading books not required for college; reading magazines; reading newspapers; listening to records; watching television; spending time with their families; and attending religious services. Dropouts also reported spending less time in community activities or organizations. Survivors were more likely than dropouts to spend time going to museums, attending lectures or concerts, and attending clubs or other social group meetings. Although these differences might reflect changes in the lives of the dropouts after leaving the College Discovery Program, they might also reflect initial differences in interests

between the two groups of students, which in turn may account for the ability to survive.

20. The vast majority of students in both groups felt that being in College Discovery had no effect on the way teachers or other students treated them.

21. The major personal change attributed by dropouts to their college experience was broadening of their intellectual and career horizons. Among survivors, the major change was thought to be an increase in self-confidence.

Section I

BACKGROUND, PURPOSE, AND METHOD

This report presents findings of the second follow-up study of students in the College Discovery Program. The first study, issued in 1968, described the reactions and experiences of students in the first entering class--the 1964 class--to the College Discovery Program.[1] The present study is a replication of the first, based on a different population of students--the 1965 entering class.

The follow-up studies are part of the over-all research endeavor to evaluate the effectiveness of College Discovery Program in facilitating higher education for students from disadvantaged backgrounds. The aims of the studies are twofold: First, by obtaining information from the students themselves on their adjustment to college--their academic progress, their

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[1] A. Dispenzieri, S. Giniger, and M. Friedman, A Follow-Up Study of the Experiences and Reactions of the Students in the First Entering Class of the College Discovery Program. College Discovery Program Research and Evaluation Unit of the City University of New York, July 20, 1968.

major difficulties, their reasons for leaving the program, factors which enable them to survive in the program--it is possible to implement changes which would assist them to continue with their higher education. Second, it may be possible to generalize the findings obtained from the study of this limited sample of college youths to broader populations of students. Students in the program represent only a very small segment of the student college population--disadvantaged youths. However, not all of their experiences and reactions to college life can be attributed to their economic and culturally disadvantaged status. These disadvantaged youngsters also represent young adults at a given stage of physical and psychological development in a society where young adults form a distinct and dynamic sub-culture. The problems and other experiences while in college of this atypical group could also reflect the problems and experiences encountered by any group of college students of the same age.

Since the subjects of this study are all participants in the College Discovery Program, a few words about the program are in order.

The project was established in 1964 by The City University of New York to facilitate higher education for high school graduates whose families could not afford to send them to college and who, in spite of evidence of the necessary intellectual ability, had high school scholastic averages too low for them to be considered for admission to any of the baccalaureate programs offered by City University. The goal of the program was to enable the students to complete their first two years of work at community colleges and then to transfer to senior colleges for their baccalaureate degrees.

The community colleges in which these students were enrolled were Bronx, Queensborough, Kingsborough, Manhattan, and New York City. Although two of these colleges, Bronx and Queensborough, had been participating in the program since its inception and therefore had a year's experience, the remaining colleges were just beginning in the program in 1965.

In selecting students for the College Discovery Program the usual criteria of high school averages and aptitude test scores were not used, since this procedure would have contradicted the purpose of the program. Instead, a nomination and selection procedure was employed.[2] Briefly summarized, the process involved soliciting nominations from high school principals and guidance counselors. The selection of those to be admitted into the program was determined according to specific academic and economic criteria. In 1965, the academic criterion consisted merely of completion of at least one year of college preparatory mathematics. The student's grades and total number of high school credits were disregarded. The economic criterion took into consideration family income and number of persons in the family. An income of $1700 per family member was generally used as a maximum cutoff point; however, exceptions were allowed if special conditions, such as prolonged illness or sporadic employment, were operating in the family.

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[2] The selection process has changed slightly from year to year. For a full description of the procedures used from 1964 through 1967 see A. Dispenzieri, S. Giniger, and S. Weinheimer, Characteristics of the College Discovery Program Students: 1964 - 1967. College Discovery Program Research and Evaluation Unit of the City University of New York, July 20, 1968. A brief description of the changes implemented in 1965, as contrasted to 1964, appears in Section XII of this report.

Students accepted into the program were required to attend a special summer session prior to their first semester in college. At these sessions remedial courses in English, mathematics, history and other core subjects were provided to assist the students to overcome some of the deficiencies which might handicap them in their future college work. In addition, tutoring services were provided throughout the freshman year. It is to be noted that although the students received this special assistantance, there was no relaxation of academic standards within the classroom setting.

Besides remedial and tutoring services, College Discovery also provided counseling services to assist students with their personal and academic problems. In order to alleviate the acute financial need of many of the students, the program provided financial assistance in the form of weekly stipends; the Program assumed the cost of all books required for courses and, whenever necessary, assisted the students in finding part-time employment.

The extent to which services provided by the Program assisted students in completing their higher education is one focus of the present report.

RESEARCH PROCEDURE

Questionnaires

This study followed the same procedures as the first follow-up study in its research design, and method of collecting and analyzing data.

Students in the class were divided into two groups:

Survivors:	Those who were still enrolled in the program as of Spring, 1967; i.e., prior to the end of the fourth semester in college.
Dropouts:	Those who had left the program at some time within the period specified above.

Separate questionnaires were administered to the two groups of students approximately two years after admission to the program. The questionnaires were similar in content and were intended to cover broad areas of the students' lives while in college. Included among these were sources of financial support;

leisure time activities; study habits; and experiences and reactions to the program as a whole and to specific program components, such as counseling and tutoring services, financial assistance, and the summer program. In addition, questions were asked regarding the activities of the dropouts after separation from the program, and plans for the future.

The dropout questionnaire contained 59 questions, while the survivor questionnaire contained 54 questions. Most of the questions in both questionnaires used precoded responses, i.e., the respondents answered the question by either circling one of several categories or by one word answers. Some of the questions were of the free response variety, i.e., the respondents could answer the question in any way they chose and could give as many answers as they wished.

Administration of Questionnaires

Administration of the follow-up questionnaire to groups of survivors took place during the Spring semester, 1967. Students were paid ten dollars for attending the testing session. Beginning in June, 1967, attempts were made to reach those who had left the program. An intensive follow-up by mail and by personal contact was necessary because many dropouts could no longer be reached at their original addresses.

Although it had not been planned to include as dropouts students who left the College Discovery Program after Spring 1967 registration, eight students who withdrew during the Spring semester were classified as dropouts.

Table 1 shows the number of students responding to the follow-up questionnaire. Almost 80% of the 1965 class returned the completed questionnaire.

TABLE 1

NUMBER OF SURVIVORS AND DROPOUTS RESPONDING TO THE QUESTIONNAIRE

	Total	Survivors	Dropouts
Number asked to fill out questionnaire	529	305	224
Number Responding	410	238	172
Percentage Responding	78%	78%	77%

The students who participated in the study resembled the entire class in ethnicity, sex, and in the community college attended (Table 2). In the study sample, as in the entire 1965 class, the largest ethnic group was U.S.-born Negroes, followed by Puerto Ricans and whites. Close to one-half of the study sample was male. In the total class, exactly half were males. Slightly over one-fourth of the students in the study sample and in the total class were enrolled in Bronx Community College. Enrollment at Kingsborough, New York City and Manhattan Community Colleges was approximately one-fifth at each college. Queensborough had the smallest number of students enrolled, 13%. The sample obtained, therefore, can be accepted as representative of the whole class.

Presentation of the Results

Responses from survivors and dropouts were tabulated separately, and responses to the same or similar questions are presented in the same tables to permit comparisons between the groups. Whenever appropriate, a statistical test of significance was made to clarify the obtained relationship.

Percentages in each table were based on the number of students actually answering each question. Since

TABLE 2

ETHNICITY, SEX, AND COMMUNITY COLLEGE ATTENDED FOR STUDY SAMPLE VS. TOTAL 1965 CLASS

Variable	Study Sample		Total 1965 Class	
Ethnicity	N	%	N	%
U.S.-born Negro	172	42	219	42
U.S.-born White	82	20	126	24
Puerto Rican	97	24	106	20
Other Spanish Speaking	21	5	25	5
Foreign-born Negro	17	4	24	5
Foreign-born White	12	3	18	3
Asian	8	2	9	2
Not Ascertained	1	*	2	*
TOTAL	410	100%	529	101%

* Less than .5%

Sex	N	%	N	%
Males	188	46	265	50
Females	222	54	264	50
TOTAL	410	100%	529	100%

Community College	N	%	N	%
Bronx	110	27	140	26
Queensborough	54	13	71	13
Kingsborough	93	23	111	21
New York City	77	19	104	20
Manhattan	76	19	103	19
TOTAL	410	100%	529	99%

all numbers were rounded to the nearest whole percent, total percentages vary from 99% to 101%.

Overview of the Report

Section II deals with the problem of attrition from the College Discovery Program. In Section III, an exploration of the probable effects of the college experience on students is made. Section IV deals with the students' sources of financial support while in the College Discovery Program.

The students' reactions, attitudes and perceptions of the overall program and of its specific components are dealt with in Sections V through VIII. Section IX explores the study habits of College Discovery students and Section X investigates the peer culture. Section XI reports the students' assessments of the effects of the college experience. Section XII contains recommendations for program planning and research implications of the findings of the follow-up studies of the 1964 and the 1965 entering classes of the College Discovery Program.

Section II

WITHDRAWAL FROM THE COLLEGE DISCOVERY PROGRAM

An important criterion in the assessment of the success or failure of the College Discovery Program is the attrition rate--the proportion of students who withdraw from the program within specified periods in time. In this section, the problem of attrition of College Discovery students will be explored by comparing the CDP withdrawal rate with that of other colleges. Second, the withdrawal rate of College Discovery students will be related to certain demographic characteristics assumed to be of importance to academic success. Finally, the reported reasons for leaving or remaining in the Program will be presented.

CDP Withdrawal Rate

At the time of the follow-up study, 43% of the 529 students who had entered the College Discovery Program in 1965 had left. This percentage includes all students who left the program within two years after admission to college, either voluntarily or through official action of the college.

The freshman year seems to be a crucial one for the majority of College Discovery students. More than half (59%) of the withdrawals occurred by the end of the first year or earlier; slightly more than one-third occurred during or by the end of the third semester; and the remaining students left within the fourth semester in community college (Table 3).

The significance of the above figures can best be clarified by comparing them to other statistics of college retention and withdrawal. There are difficulties, however, in attempting to compare the CDP rate of attrition to that of other colleges because of differences in the populations, different admission and retention policies used by various colleges, differences in time span used, and differences in the definition of what constitutes a withdrawal. The data which are presented, therefore, are among the most comparable in at least one of these areas.

In a study by Cresci, attrition was examined in 23 California Junior Colleges for the year 1962-1963. The study revealed that of 47,190 full-time students

TABLE 3

WHEN DROPOUTS LEFT THE COLLEGE DISCOVERY PROGRAM

	N	%		
During or by the End of First Semester	52	31		
Didn't finish summer or completed summer but didn't enter first semester			10	6
Didn't complete first semester			17	10
Completed first semester; didn't enter second semester			25	15
Completed Second Semester But didn't Enter Third Semester	48	28		
During or at the End of the Third Semester	64	37		
Entered third semester; didn't complete it			11	6
Completed third semester; didn't enter fourth semester			53	31
During or at the End of the Fourth Semester	8	4		
Entered fourth semester; didn't complete it			4	2
Completed fourth semester; but didn't graduate or re-register			4	2
TOTAL			172	100

in the 23 community colleges, 42% left prior to completion of degree requirements,[3] a finding very close to the 43% who dropped out of the 1965 College Discovery class.

Although it is expected that among the survivors in CDP there will be other withdrawals prior to completion of the degree requirements, the additional percentage will probably not be substantial. Studies done on the problem of withdrawals from college (senior or community college) have revealed that the largest number of withdrawals generally occurs during the first year and that this percentage gradually diminishes in subsequent years.

The Cresci study is especially relevant for two reasons. First, the study provided data on students who left the community colleges regardless of reason (academic, personal, transfers, etc.). This is exactly what constitutes the present study's definition of a dropout. Second, the California Junior College system follows an open door policy, i.e., their admission policy is somewhat similar to that of the College Discovery Program. Students who are accepted do not necessarily have to meet strict academic requirements. Generally all that is required is interest, a desire to go to college, and a potential to do college work.

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[3] California Bureau of Junior College Eduaction, Release No. 10, February 7, 1964, p.2.

A second study allows comparison of CDP and non-CDP students in the same institution during the same time period. A study of students who entered Bronx Community College in the Fall, 1965 revealed that by June, 1967, 34% of the students were no longer attending the college either because of loss of matriculation or other reasons.[4] Among CDP entrants to the same institution, the withdrawal rate was 53% (See Table 4). Apparently, in Bronx Community College CDP special services to its students have not been able to make up for the educational deficiences and/or the many family and personal problems which interfere with CDP students' education.

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[4] Attrition-Retention: Fall 1965 Class, Part A, Summer 1967, p.1. Bronx Community College of the City University of New York, Institutional Research and Studies, Special Research Project.

Data is not available for other CUNY community colleges comparing withdrawal rates of CDP students with non-CDPs in the 1965 class. There is data available, however, which suggests that under certain circumstances the withdrawal rate of CDPs is similar to that of non-CDPs. Figures provided by the office of the Coordinator of Institutional Research of the City University of New York revealed that among all students enrolled at New York City Community College at the beginning of Spring 1968 semester, CDP students withdrew in about the same proportion (15%) as regular matriculated students (11%) by the end of the semester. The figures for New York City Community College are impressively favorable to the College Discovery Program.

Withdrawal According to Community College and Type of Curriculum

The dropout rate among students entering in 1965 differed significantly according to the college attended (Table 4). Slightly more than half of the College Discovery students at Bronx and Queensborough left the program, compared with four out of ten students at Manhattan and Kingsborough, and only three out of ten at New York City.

TABLE 4

COMMUNITY COLLEGE ATTENDED

	Survivors		Dropouts		Total Sample	
	N	%	N	%	N	%
Bronx	52	47	58	53	110	100
Queensborough	26	48	28	52	54	100
Kingsborough	59	63	34	37	93	100
New York City	56	73	21	27	77	100
Manhattan	45	59	31	41	76	100
TOTAL	238	57	172	43	410	100

$x^2 = 15.35$
df = 4
$p < .005$

The higher rates at Bronx and Queensborough occurred despite the fact that these two colleges participated in the program since its inception. The low dropout rate at New York City was due, in part, to a liberal grading policy in which D's and F's were disregarded if higher grades were attained by makeup examinations.

In contrast with college attended, the type of curriculum in which the students enrolled (i.e., liberal arts, business or pre-engineering) was not significantly related to survival in College Discovery. Table 5 indicates that the proportions of survivors and dropouts reflected the proportions in the overall sample. The preponderate number of students (85%) were enrolled in liberal arts, and very small minorities were enrolled in business (12%) and engineering curricula (3%).

Sex and Ethnic Distribution Among Survivors and Dropouts

Neither sex nor ethnicity proved to be a reliable predictor of which students will leave the program within two years of admission. Table 6 indicates that the male-female distribution among survivors and dropouts was generally similar. Slightly less than one-half of each group were males.

TABLE 5

CURRICULUM

	Survivors		Dropouts		Total	
	N	%	N	%	N	%
Liberal Arts	206	87	141	83	347	85
Business	26	11	24	14	49	12
Pre-engineering	6	3	5	3	12	3
TOTAL	238	101	170	100	408	100

X^2 = not significant

TABLE 6

SEX DISTRIBUTION

	Survivors		Dropouts		Total	
	N	%	N	%	N	%
Male	108	45	80	47	188	46
Female	130	55	92	53	222	54
TOTAL	238	100	172	100	410	100

Table 7 shows that members of various ethnic groups left the College Discovery Program in the same proportions as they entered: about two-fifths were U.S.-born Negroes; one-fifth were U.S.-born Whites; one-fourth were Puerto Ricans; and 15% were of miscellaneous ethnic backgrounds (foreign-born Negroes and whites, Asians, and Spanish-speaking students other than Puerto Ricans).

Marital Status, Presence of Parents in the Household

The investigation of the current marital status of survivors and dropouts revealed that although the substantial majority of students in each group was single, significantly more dropouts were married (Table 8). Although some students did leave college to get married, others decided to marry after dropping out.

Table 9 indicates that significantly fewer dropouts lived with both parents. Moving away from home, however, generally reflected the student's situation after leaving College Discovery. Married students or those in military service no longer lived with parents.

TABLE 7

ETHNIC DISTRIBUTION

	Survivors		Dropouts		Total	
	N	%	N	%	N	%
U.S.-born Negro	93	39	79	46	172	42
U.S.-born White	47	20	35	20	82	20
Puerto Rican	60	25	37	22	97	24
Other Spanish speaking	13	5	8	5	21	5
Foreign born Negro	12	5	5	3	17	4
Foreign born White	6	3	6	4	12	3
Asian	6	3	2	1	8	2
Not ascertained	1	*	--	--	1	*
TOTAL	238	100	172	101	410	101

* Less than .5%

TABLE 8

MARITAL STATUS

	Survivors		Dropouts	
	N	%	N	%
Single	233	98	145	84
Married	5	2	26	15
Separated	--	--	1	1
T O T A L	238	100	172	100

$X^2 = 22.55$
df = 1
$p < .001$

Note: "Separated" category was omitted from X^2.

TABLE 9

PRESENCE OF PARENTS IN THE HOUSEHOLD

Student:	Survivors		Dropouts	
	N	%	N	%
Lives with two parents, at least one is natural parent	138	58	61	36
Lives with one natural parent only	76	32	48	29
Lives with others (including foster parent, husband, military service).	24	10	59	35
TOTAL	238	100	168	100

$x^2 = 38.24$
df = 2
$p < .001$

Reasons for Leaving The College Discovery Program

The reasons students gave for leaving CDP constitute a very important dimension in understanding the attrition problem.

In response to the question, "What was your major reason for leaving the College Discovery Program?" students usually gave more than one response. These responses are categorized in Table 10.

The most frequently given reasons were motivational problems, cited by 39% of the students. Many of these students lost interest in their college work; others were confused about their college goals or were not sure that they wanted or needed a college education; still others were certain that a college education was not required for what they were interested in doing.

Family problems and financial difficulty were mentioned as major reasons for leaving the program by 35% and 34% of the students, respectively. The financial difficulties faced by the students were generally chronic in nature. In many cases students felt the need to work to assist their families. Some of these students wanted to remain in college but could not withstand active family pressure for them to assume wage-earner roles. There were a few instances where precarious family financial situations were aggrevated by sudden illnesses or accidents. Finally, there were cases where the students simply wanted to earn money to get away from unwholesome family situations or for other personal reasons.

Another major reason for leaving the program, mentioned by 24% of the students, was dissatisfaction with the program itself. The dissatisfaction centered for the most part around lack of personal choice in pursuing a course of study.

> ... I would have stayed in CDP if I were given the Career Program that I wanted to go in (Mechanical Technology). I feel CDP students should be given the opportunity to select their own field regardless of former education -- let them pick what they want. Don't forget CDP is an experimental program. While I was in the Liberal Arts Program I was quite unhappy, not because of the curriculum, but because I did not want a transfer program. I know that Mechanical Technology was harder than Liberal Arts but I would have been very happy in Mechanical Technology. I would have given a much harder effort in Mechanical Technology than in Liberal Arts.

> ... Most of us were told that we could not have the programs we had previously

TABLE 10

REASONS FOR LEAVING THE COLLEGE DISCOVERY PROGRAM

	Dropouts (170) N	Dropouts (170) %
Poor Motivation	66	39
Did not apply himself to work, loss of interest	49	29
Confused about goals; not sure wants or needs college education	21	12
Wanted to do something not requiring college	8	5
Other	3	2
Family Problems	59	35
Financial problems; wanted to earn money to help family	38	22
Disorganized home situation	21	12
Family opposed or not concerned about college	6	4
Family responsibilities interfered with school	6	4
Illness, deaths in the family	2	1

TABLE 10
(Continued)

	N	%		
Financial Problems	57	34		
Financial problems (pertaining to family or unspecified)			38	22
Wanted to earn money, become independent of family			17	10
Work interfered with studies			14	8
College Program or College Not Suited to the Student	44	26		
Student did not like program: Wanted some other Program			41	24
Traveling difficulties; too much travel			6	4
Personal, Emotional Problems	33	19		
Psychological; personal problems			28	16
Lack of self-confidence; immaturity			10	6
Miscellaneous				
Inadequate aptitude or training for college	14	8		
Student was failing (not further specified)	10	6		
Marriage	11	6		
Army	6	4		
Other	12	8		

Note: Multiple response is possible.

> applied for (Liberal Arts). There was no criterion set for those CD students who were chosen for Liberal Arts, for most had lower averages as well as failures for the preparatory term at BMCC (Borough of Manhattan Community College). Yet a small number of CD students were placed in Liberal Arts, and the rest, although unwillingly, were dispersed among the mongers in the business world. I, myself, received small business as a curriculum. I could have killed! .....

Other students who expressed dissatisfaction with the program left primarily because of travel difficulties, while a very small number mentioned the feeling that the teachers and the rest of the student body were condescending toward CDP students.

Besides motivational, family, and financial problems, and dissatisfaction with the college or program, personal problems were cited as a reason for leaving by 19% of the students. Frequently, the motivational, family, and personal problems, and other circumstances were intertwined to create a dropout. Below are few examples of the reasons students gave, showing the complexities of the problem:

> ... I had difficulties with traveling. It took me an hour and a half to get to school. When I would get home I would be tired and did not want to study. Also I did not have a quiet place to study. Then I started having problems at home. This also took me away from my studying.

Soon I did not want to take that long ride to Queensborough where I was not learning anything. I just stopped studying for the finals and decided to go to work. Also, I lost matriculation. I did not feel like going at night. I could not afford it either.

... I was a foreign student and I had some difficulties to understand English, so I have been a very poor and slow student. I could not understand the lecture classes, I always had a dictionary with me. And again, I am crippled; I have polio in one leg -- that makes me feel shy and ashamed of myself. When in class I was afraid of speaking. I was always alone and refused to talk about my problems to my adviser. At first, I tried and tried hard to pass my subjects. Then I became disheartened and gave up ... I just let go and would not study ...

... I had difficulty with my foster parents, whose attitude toward my going to college was very apathetic. The arguments all the time affected my studying, so that when I came to school all I wanted to do was to get away from home. In school I was interested and disinterested at the same time.

... I was not sure what I wanted out of life. I lost track of my goals and did not take seriously all the advice given to me. Also, my home situation did not lead to easy studying.

... I did not find the courses of the faculty very stimulating. I had the problem every freshman has -- to get adjusted to college life.

... The major reason was my home life. I could not adjust myself to the new rules my mother had decided to lay. I was working and attending college five days a week so I could not understand why the weekends could not be

> spent doing as I pleased. After you get to that humdrum of working and going to school five days a week you needed something to break the monotony. I did not go out that much but when I did my mother had something to say. She was contented in seeing me in the house seven nights a week. And I could not see it. So naturally, I rebelled. I started having a ball, which only made things worse. She stayed on my back day in and day out until I got to the point where I did not care anymore. I was dismissed from the Program because my index was too low.

Feelings About Withdrawing from CDP and Expectations About Returning to CDP

Dropouts were asked whether they agreed or disagreed with three statements on their feelings about leaving and their expectations about returning to CDP. Approximately 80% of the students (N = 129) felt that they really wanted to stay in college. One third (N = 53), however, felt that it was better for them that they were no longer in the Program. Many of these were students who had transferred to other college programs. Others regarded leaving college as the only realistic course of action at the time, considering their circumstances and problems.

With regard to returning to CDP, approximately half of the dropouts (N = 76) expected to re-enter at some time in the future. While this is probably an over-estimate of those who will actually re-enter, it is an indication of a favorable attitude toward CDP even among those who left.

Factors Which Enabled Survivors to Remain in CDP

In understanding attrition, equally as important as the reasons why students leave the program are the factors which enable students to remain. Table 11 shows the responses to the question, "What is the *major* factor that enabled you to continue your studies, in spite of any difficulties you may have had?"

The major factor credited by survivors for remaining in college was their own personal drive and perserverance, bolstered by a recognition of the need for education (73%). Other factors were advice and encouragement from family and friends (20%), the support of college counselors and teachers (13%), and CDP financial assistance (8%). It is interesting that survivors perceived personal drive as the major factor for survival in a college program that offers such a variety of assistance as CDP. It appears that external support is not perceived as sufficient for success without internal drive.

TABLE 11

FACTORS ENABLING SURVIVORS TO REMAIN IN COLLEGE

	Survivors (226)			
	N		%	
Personal drive; desire for education	166		73	
Drive, perserverance		121		54
Desire for education		60		27
Like school work		9		4
Support of family and friends	45		20	
Family encouragement		37		16
Advice of friends		13		6
Support of college counselor, teachers	30		13	
Advice of counselors		27		12
Support of teachers		6		3
College Discovery financial help	19		8	

Note: Multiple responses were possible.

Section III

ACADEMIC STATUS, EMPLOYMENT PATTERN, AND STUDENTS' ASPIRATIONS

One of the major goals of the College Discovery Program is to raise the educational level, aspirations, and career prospects of the students. This section deals with data pertaining to these three areas while the students were in CDP, as well as after their separation from the program.

Academic Status of Dropouts

For a significant number of dropouts, withdrawal from the College Discovery Program did not mean the end of higher education. An impressive 37% of dropout students had resumed school at some time after leaving College Discovery, and one third (N = 54) were still attending school at the time of the follow-up study. In the latter group were a few students (3) who had dropped out soon after admission, but who had been re-admitted into the program. Most of the students who were attending school were matriculated and working for either an Associate or a Bachelor's degree (Table 12).

TABLE 12

DEGREES SOUGHT BY DROPOUTS WHO ARE CURRENTLY ENROLLED IN SCHOOL

	Dropouts	
	N	%
Associate in Arts	22	41
Associate in Applied Science	6	11
Bachelor of Arts or Science	22	41
Other (nurse's license, certificate)	4	7
TOTAL	54	100

Among the students classified as dropouts, 42% (N = 72) were working (without attending school), 16% (N = 28) were in the military service, and 11% (N = 18) were engaged in other activities, such as being housewives or in the Peace Corps.

Among the students who attended school after leaving College Discovery (including the few no longer attending at the time of the follow-up study), over half (N = 35) went to two-year schools. Senior college was the choice for 17% (N = 11) of the students, while the remainder had enrolled in vocational, trade, business, secretarial, professional, or semi-professional schools (N = 10). The majority of these students (56%) were enrolled in evening sessions; one-third managed to attend full-time day sessions, and the rest attended part-time during the day.

Employment Pattern: Dropouts

The respondents were asked to list their three most recent jobs, and for each job listed they were asked to describe the nature of the occupation, the number of hours worked per week, and the amount earned per hour (Tables 13 to 18).

Before proceeding to discuss the findings, it is necessary to clarify the data which the tables contain. The jobs listed under the heading "Most Recent Job" refer for the most part to jobs obtained after leaving the College Discovery Program. As initially indicated, 42% of all dropouts were working at the time of the follow-up study, and many of those who were attending school either on a part-time basis during the day or on an evening session basis also worked. Some jobs listed as "most recent" may be those of a few students who held jobs while in College Discovery but have not worked since leaving the program. Housewives or students who left CDP shortly before the follow-up study and had not yet been able to find jobs are most likely to list a job held while in CDP as "most recent."

The heading "Previous Job" refers to the job which the student had prior to the most recent job. Included under the "Previous Job" category are positions obtained while in CDP as well as after leaving the program.[5]

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[5] Sixty-seven percent of the dropout students worked at some time while in college.

√

Finally, the category "earliest Job" refers to jobs held immediately prior to the "previous job." This category refers for the most part to jobs obtained while in CDP. However, it may also include positions obrained in high school, or positions obtained after leaving CDP for students who left the program very early and had time to work at three or more places. Thus, the categories are not mutually exclusive in reference to the time when the dropouts obtained their positions.

As Table 13 shows, the number of dropouts who indicated they had jobs increased from 44 (26% of the sample) for the earliest job to 141 (82%) for the most recent job. Although this might indicate non-response, it might also reflect the fact that most students have had only one job, usually either during or after their CDP experience. This alternative explanation seems a very likely possibility when it is considered that the highest unemployment rates are generally among youths 19 years of age or younger, in particular non-white youths.[6] It is, therefore, reasonable to infer that

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[6] U.S. Dept. of Labor, Manpower Administration, Statistical Tables on Manpower, A Reprint From The 1968 Manpower Report. Washington, D.C., p.237.

TABLE 13

RECENT JOBS HELD BY DROPOUTS

	Most Recent Job		Previous Job		Earliest Job	
	N	%	N	%	N	%
Office or clerical work	95	67	48	55	26	59
Sales work	9	6	11	13	3	7
Recreation asst., counselor, group leader	5	4	10	12	3	7
Unskilled, household service work	7	5	4	5	4	9
Asst. teacher, tutor	3	2	3	3	-	-
Library worker	1	1	3	3	1	2
Semi-silled service work	12	9	3	3	4	9
Other (nurses aide, technician, skilled)	9	6	5	6	3	8
TOTAL	141	100	87	100	44	101

job opportunities were more often available as the student increased in age and as he acquired more marketable skills as a consequence of his college experience.

The table also shows that dropouts generally worked in clerical positions. The major change in the type of work done was an increase of 12 percentage points in the number of students who held clerical positions, from 55% for the previous job to 67% for the most recent job.

The number of students in clerical positions is impressively high in view of the fact that many of the students are Negroes and Puerto Ricans, groups which tend to occupy the bottom steps on the occupational scale of our economy. A comparison of these findings with occupations held by groups of similar age who have graduated from high school but have not attended college provides an idea of the probable effects of college attendance on the occupations of the students.

Project Talent collected data on a national sample of 100,000 ninth graders who graduated from high school in 1964. It was found that one year after graduation, the greatest percentages of high school graduates were in the Armed Forces or in unskilled (driver, farm laborer, miner, etc.) or skilled positions (electrician, machinist, mechanic, etc.).[7]

Statistics provided by the U. S. Department of Labor on the major occupations in 1966 of employed high school graduates not enrolled in college showed that, unlike CDP students, many high school graduates held semi-skilled positions. Approximately one out of every five students who graduated in 1964 or in 1965 held operative or kindred positions.[8] Although other explanations cannot be ruled out as affecting the employment pattern of dropouts, it seems that college attendance assisted former CDP students to obtain positions a few steps higher in the occupational scale.

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[7] Project Talent News, American Institute for Research and University of Pittsburgh, Vol. 6, No. 1, Oct. 1967, p.4. The term "graduates" refer to high school graduates.

[8] Employment of High School Graduates and Dropouts In 1966, Special Labor Force Report No. 85. A monthly labor review reprint from the July, 1967 issue, U.S. Dept. of Labor, Bureau of Labor Statistics, p.A - 7.

The results obtained on the number of hours worked per week (Table 14) and on the amount earned per hour (Table 15) also showed several changes in the employment pattern of the dropouts.

As would be expected, many more dropouts were working full time (that is 35 hours or more) in their most recent jobs than in their previous positions. This finding again confirms our inference that, for the majority, previous positions were generally obtained while they were students.

Hourly pay also increased over that earned in former jobs. While previously almost all had made $2.00 an hour or less, in the most recent job only 61% earned this low wage. The maximum reported top pay was $4.50 an hour for one student.

Employment Pattern: Survivors

The employment pattern of survivors is not comparable to that of dropouts, for most of the jobs were obtained while the survivors were still attend-

TABLE 14

NUMBER OF HOURS WORKED PER WEEK BY DROPOUTS

	Most Recent Job		Previous Job		Earliest Job	
	N	%	N	%	N	%
Less than 15 hours	6	4	5	6	4	9
15 - 19	8	6	11	13	9	20
20 - 24	10	7	14	16	8	18
25 - 29	3	2	2	2	1	2
30 - 34	6	4	10	12	2	5
35 hours or more	106	76	44	51	20	45
TOTAL	139	99	86	100	44	99

X^2: Most recent job vs. previous job; 35 hours or more vs. all others = 13.95, 1 df; $p < .001$

X^2: Most recent job vs. earliest job 35 hours or more vs. all others = 13.39, 1 df; $p < .001$

TABLE 15

AMOUNT EARNED PER HOUR BY DROPOUTS

	Dropouts					
	Most Recent Job		Previous Job		Earliest Job	
	N	%	N	%	N	%
$2.00 or less	83	61	81	94	36	84
$2.01 or more	53	39	5	6	7	16
TOTAL	136	100	86	100	43	100

X^2: most recent job vs previous job = 28.31, 1 df, $p<.001$

X^2: most recent job vs earliest job = 6.56, 1 df, $p<.01$

ing college. The full-time student status, therefore, affects the type of employment, number of hours worked, and salary earned.

Like dropouts, survivors tended to work in clerical positions (Table 16). The percentage of survivors holding positions generally associated with student status, such as recreation assistants, counselors, and assistant teachers or tutors, was higher than the percentage of dropouts in these jobs.

Most of the jobs held by survivors were part-time (Table 17). This finding reflects existing policies at the colleges, which discourage students in the program from holding full-time positions. The amount per hour earned by survivors at their various jobs was generally $2.00 or less (Table 18).

Occupational Aspirations

Although more pronounced among survivors, the level of career aspiration is high among all students. In Table 19, responses to the question "What kind of career or job are you considering as your life's work?" clearly indicate that professional jobs are the most attractive to both groups.

TABLE 16

JOBS HELD BY SURVIVORS WHILE IN CDP

	Survivors					
	Most Recent Job (173)		Previous Job (114)		Earliest Job (68)	
	N	%	N	%	N	%
Clerical, office	99	55	56	49	32	47
Recreation asst. worker, counselor, group leader, social work at church	19	11	16	14	9	13
Asst. teacher, tutor	9	17	15	13	5	7
Library worker, aide	14	8	10	11	6	9
Sales work	11	6	7	6	2	3
Semi-skilled service machine	6	3	2	2	2	3
Unskilled	5	3	4	4	4	6
Other skilled tradesmen, nurses aides, technicians, managers	10	6	3	3	8	12

TABLE 17

NUMBER OF HOURS WORKED PER WEEK BY SURVIVORS

	Most Recent Job		Previous Job		Earliest Job	
	N	%	N	%	N	%
Less than 15 hours	63	36	42	38	25	38
15 - 19	51	29	30	27	11	17
20 - 24	28	16	17	15	14	21
25 - 29	9	5	3	3	0	-
30 - 34	9	5	6	5	6	9
35 hours or more	16	9	13	12	10	15
TOTAL	176	100	111	100	66	100

TABLE 18

AMOUNT EARNED PER HOUR BY SURVIVORS

	Most Recent Job		Previous Job		Earliest Job	
	N	%	N	%	N	%
$2.00 or less	155	87	105	95	59	91
Over $2.00	22	12	6	6	5	9
TOTAL	178	99	111	101	64	100

TABLE 19

OCCUPATIONAL ASPIRATIONS

	Survivors		Dropouts	
	N	%	N	%
Teaching	109	46	37	23
Social work	24	10	9	6
Other professions except performing or Creative Artists	36	15	19	12
TOTAL PROFESSIONS	169	71%	65	41%
Technicians	8	3	19	12
Sales, Clerical	3	1	15	9
High white collar (executives, supervisors, managers, Agents)	12	5	11	7
Performing or creative artists	6	3	7	4
Miscellaneous (skilled; protective work; Armed Forces, etc.)	26	11	16	10
Undecided	12	5	28	17
TOTAL ALL OTHERS	67	28%	96	59%
TOTAL	236	99%	161	100%

X^2: Professions vs. all others = 37.31
df= 1
$p < .001$

Seven out of ten survivors said they would like to pursue a profession; half of these preferred teaching. Dropouts, like survivors, selected careers in professions, but the proportion (only four out of ten) making this choice was significantly lower than among survivors. The teaching profession ranked highest among dropouts. Dropouts were more likely than survivors (12% vs. 3%) to choose technician jobs, such as laboratory, dental or computer technician. Only 1% of the survivors, but 9% of the dropouts, indicated interest in sales or clerical positions. Of particular significance was the striking contrast between the certainty of the survivors and the indecision of the dropouts regarding their futures. Only 5% of the survivors, but 16% of the dropouts, were vague or undecided about future occupations.

For most students there was no change in the choice of a career since leaving high school. Only about one quarter of the survivors and a third of the dropouts claimed to have reconsidered and chosen a new goal. Equal proportions in each group (13% and 14%) attributed the change incareer goals to positive or negative college experiences in career-related courses.

Academic Aspirations

An overwhelming majority of survivors (N = 198, 84%) were working for an Associate in Arts degree at the time of the survey and 11% (N = 27) were working toward an Associate in Science degree. Ten students claimed they were working for other degrees, while one said he did not seek a degree.

When asked: "What degree of training do you need for the career or job you are considering?" both groups showed high educational aspirations, but a graduate degree was felt necessary by more survivors.

Approximately 4 out of 10 in each group felt they would need at least a Bachelor's Degree (Table 20). The proportion of survivors aspiring to jobs requiring a degree beyond the Bachelor's was considerably higher than that among dropouts: 37% of the survivors felt that they would need a Master of Arts or Science, and 8% felt that they would need a Ph.D. Among dropouts, 17% felt they would need a Master of Arts or Science and 2% felt they would need a doctoral degree. Fourteen percent of the dropouts aspired only to an Associate degree, as compared to 6% of the survivors. Fourteen percent of the dropouts, compared with only

TABLE 20

DEGREE OR TRAINING REQUIRED FOR CAREER

	Survivors		Dropouts	
	N	%	N	%
Associate in Arts or Applied Science	15	6	21	14
Bachelor of Arts or Science	103	44	60	41
Master of Arts or Science	85	37	25	17
Ph.D.	18	8	3	2
Other	10	4	17	12
None beyond high school	2	1	20	14
TOTAL	233	100	146	100

$X^2 = 42.11$
$df = 4$
$p < .001$

one percent of the survivors, felt that they would not need any degrees beyond a high school diploma. The remaining 12% of the dropouts and 4% of the survivors claimed they sought other kinds of degrees. The difference between the kinds of degrees sought by the two groups was statistically significant ($X^2 = 42.11$, $df = 4$, $p < .001$).

The high occupational and educational aspirations found among the two groups of students are in agreement with other studies which have shown that students from culturally deprived backgrounds tend to have academic or occupational aspirations as high or sometimes higher than students from more secure economic backgrounds.[9] Although the high aspirations of some students, particularly dropout students, may be unrealistic considering their past performance and may indicate an attempt to bolster self-esteem by aiming high, this may not be the case for many other students who are actually striving toward the fulfillment of their goals.

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[9] A review of some of these studies is provided by Harold Proshansky and Peggy Newton, "The Nature and Meaning of Negro Self-Identity," in Martin Deutsch, Irwin Katz and Arthur Jensen (eds.) Social Class, Race, and Psychological Development. New York: Holt, Rinehart and Winston, Inc., 1968, pp.178-218.

Plans For The Following Year

Students were also asked about their plans for the following year. Although these plans may not be carried out, over two-thirds (69%) of the dropout students anticipated being in school. Only 14% intended just to work, while 15% felt they would be in the military service. The remianing 2% planned either to be housewives or in the Peace Corps.

All but 6% of the survivors also planned to continue school the following year. Many, however, no longer expected to remain in CDP. Over one-third (36%) did not plan to remain in College Discovery for their next year in school. An interesting research question suggested by this finding is whether or not these students are aware that they can attend senior college under the auspices of the program. Three percent of the survivors said that they would be in military service; 3% said that they would be either housewives or Peace Corps workers. Only one student intended to leave school for a job.

Life Values

The values which students regard as important undoubtedly have an influence on their choices of career, on their aspirations, and on their academic performances. It is logical to ask next: Do survivors differ from dropouts in the values they regard as significant?

Students were asked to rate the importance of nine different life values. However, it was found that none of the items differentiated survivors from dropouts (Table 21). Although a smaller proportion of survivors felt that having a good standard of living was very important, or emphasized the importance of "leisure time," neither of these differences achieved statistical significance.

By and large, most of the values listed were regarded as of some importance or highly important, with self-development and career, generally regarded as the two most important areas by both groups. These choices were followed in ranking by a good standard of living and relations with family. The only two items which a substantial number of students (close to one-fourth in each group) did not regard as important were participation in community affairs, and working for international or national betterment.

TABLE 21

IMPORTANCE OF LIFE VALUES

	Survivors						Dropouts					
	Very Important		Somewhat Important		Not So Important		Very Important		Somewhat Important		Not So Important	
	N	%	N	%	N	%	N	%	N	%	N	%
Self-development and self improvement	221	94	11	5	2	1	159	94	9	5	2	1
My Career or Occupation	195	83	38	16	2	1	148	87	16	9	6	4
Having a good Standard of living	168	72	62	26	5	2	139	82	29	17	2	1
My relations with my family	168	71	57	24	11	5	126	74	37	22	8	5
Getting along well with my friends	120	51	99	42	16	7	99	59	57	34	13	8
Moral or religious beliefs	114	49	85	36	36	15	97	57	53	31	20	12
Participation in Community Affairs	40	17	147	63	47	20	33	20	93	56	40	24
Working for Nat'l or Internat'l betterm't	68	29	123	52	46	19	54	32	82	49	33	20
Leisure time, Recreational Activities	96	41	115	49	25	11	54	32	88	52	27	16

These findings suggest that the two groups of students have internalized American values of individual success and material well-being, and that these values are prime influences in their desire to pursue careers associated with college degrees. These findings have some importance in devising educational programs for disadvantaged students. Without going into an elaborate discussion of the philosophical questions of the functions of higher education, it seems that these students' interest in continuing with their higher education can be maintained primarily in so far as students see the relevance of college courses to their long range economic goals.

The markedly low importance attached by CDP students to participation in community affairs and working for national or international betterment is in striking contrast to what news media currently call "the prevailing mood of militancy in the campus." If the response may be taken at face value, CDP students in the 1965 class seemed remote from what passes for the mainstream of campus life.

Section IV

SOURCES OF FINANCIAL SUPPORT WHILE IN THE COLLEGE DISCOVERY PROGRAM

A basic requirement for admission into the College Discovery Program was that the applicant come from a low income family. For the 1965 class the maximum income level in a family was $1700 per person per year. These families could not afford to send their children to college at their own expense. Even without tuition, the costs of attending college--books, laboratory fees, transportation, and lunch money, among other expenses--are generally more than the parents can afford.

Provision is made in the College Discovery Program to assist students with their financial needs. For the 1965 class, College Discovery provided a small weekly stipend of $5.00 to each student in order to cover lunch and carfare expenses. In addition, the program assumed the cost of all required books. In some instances, scholarships were made available for students with special needs. Whenever necessary, the program provided assistance in finding part-time employment.

In spite of College Discovery financial assistance, many of the students who left the program cited financial difficulties as a major reason for leaving. This finding raised several questions: What sources of income are available to the students? To what extent do students make use of the financial resources provided by the program? To what extent does the financial assistance meet the students' needs? We now turn our attention to these questions.

Sources of Financial Support

In the investigation of the sources of income available to students while in the College Discovery Program, an attempt was made to identify the specific sources of income as well as the relative amount that students obtained from each source. This was done by means of a question which listed a series of different sources of income and asked the proportion of total money obtained from each source, i.e., whether they obtained "all or most," "about half," "a little," or "none" from each of seven different sources.

Unfortunately, many students in the survivor group misinterpreted the question and checked more than one item for the "all or most" category. Consequently, the results will be presented only in terms of specific sources of student income without regard to the extent of support from each source. This information is shown in Table 22.

The most frequently used sources by both groups are College Discovery stipends, family income, and the student's own earnings, in that order. The least used sources by both groups, as would be expected considering the students' economic deprivation, are personal savings, family savings, and loans.

The majority of both survivors and dropouts utilized stipends (91% and 76%), family income (80% and 67%), and personal earnings (85% and 63%). A majority of survivors (58%) and a large number of dropouts (42%) used the work-study subsidy. The large percentages using family income and students' earnings in both groups seem to indicate that a substantial number of students and families are willing to make considerable effort and sacrifice to support the students' college career. Since family income is known to be low ($1700 or less per family member per year), student support from this source is impressive evidence of a strong commitment to higher education.

In noting the differences between survivors and dropouts, of particular importance is the fact that without exception the proportion of survivors utilizing each source was significantly higher than that of dropouts. Not only did a larger proportion of survivors use each source of financial support, but many more used several sources, as indicated by the greater overlap found in the survivor column of Table 22.

The regularity with which survivors differ from dropouts in the use of financial resources suggests the hypotheses that the differences observed between the dropouts and the survivors may be a function of the personality make-up of the two groups of students, such as differential energy levels or inability to make use of resources. But time spent in the program can not be wholly disregarded as a possible influence. Survivors generally stayed in the program for a longer period of time than dropouts. Throughout their longer college careers they may have had to go from one source to another as original sources were exhausted. Similarly, students who stayed in the program for a longer period of time have a longer period of time to

TABLE 22

SOURCES OF FINANCIAL SUPPORT WHILE IN COLLEGE

	Survivors			Dropouts		
	Base[a]	N	%	Base	N	%
Stipend from CDP ****	(223)	203	91	(172)	131	76
Family Income *	(221)	176	80	(172)	115	67
Student's earnings ****	(220)	187	85	(172)	108	63
Work Study in CDP ****	(196)	113	58	(172)	72	42
Student's savings ****	(201)	84	42	(172)	41	24
Family savings *	(195)	38	19	(172)	16	9
Loan ****	(175)	34	19	(172)	8	5

* Significant at the .05 level
**** Significant at the .001 level

[a] Many survivors failed to answer several of the items.

secure employment while going to school, and consequently to accumulate some personal savings.

Utilization of CDP Financial Assistance

As part of a longer series of questions dealing with the evaluation of college facilities, students were asked about their experience with CDP stipends and other financial assistance. Almost every student in the survivor group (99%) and the overwhelming majority of dropouts (92%) had received at least one form of financial assistance. The trend showing that more survivors than dropouts received at least one form of financial assistance was not significant when tested by Fisher's exact probability test.

Although the substantial majority of students in each group received at least one form of financial assistance, significantly more survivors than dropouts (91% vs. 76%) received stipends from CDP. The findings may be a function of personality factors in dropout students; e.g., dropouts may be less willing to accept money than to accept books or assistance in finding employment. However, the finding may also be a function of the time spent in the program. Students who left at the end of the summer program or during the first semester may not have received stipends even though they were eligible for them. A third possible interpretation is that there might be special administrative difficulties connected with the stipend program. Some dropouts may have been forced to leave either because of unintentional delays or other difficulties in receiving the stipends. Although survivors may have been subjected to the same difficulties, the greater number of financial resources utilized by them may have mitigated the effects of delays in delivery of stipends.

Evaluation of CDP Financial Assistance

Students were asked to evaluate the adequacy of CDP stipends and other forms of financial assistance in terms of whether they considered them "very good," "adequate," or "poor." Approximately 80% of the students in the two groups rated the assistance as at least adequate. Thirty-five percent of the survivors and 44% of the dropouts rated the CDP financial assistance as very good. The difference in ratings of the two groups was not statistically significant.

Section V

STUDENTS' EXPERIENCES IN THE COLLEGE DISCOVERY PROGRAM

Information about the students' experiences in the College Discovery Program was gathered systematically throughout the questionnaire by means of a series of fixed alternative (precoded response) and free response questions. This section will deal with responses to questions intended to elicit attitudes and feelings about CDP as a whole; utilization and evaluation of specific program facilities and services; students' perception of their major difficulties while in CDP; and their suggestions for program improvement. Further elaboration of the students' reactions to the summer sessions, counseling, and tutoring services will be dealt with in Sections VI, VII and VIII.

Degree of Satisfaction With CDP

The degree of satisfaction with CDP was assessed by a multiple choice question containing five alternative statements. Since only seven respondents (two survivors and five dropouts) selected the statement indicating the greatest degree of unhappiness ("I am not at all happy about the CDP -- there's almost nothing about it that I have liked"), for purposes of analysis these seven responses were combined with responses to the statement "... on the whole I have not been happy about CDP."

The results for this question appear in Table 23. It is clearly shown that the great majority of both groups were happy with CDP, but survivors were generally more satisfied than were dropouts: almost twice the proportion of survivors as dropouts stated that they were "fully happy about CDP"--they liked "just about everything" in the program. However, the fact that over two-thirds of the dropouts expressed favorable attitudes toward CDP by stating that "...on the whole I have been happy about the CDP..." supports other data throughout the report which indicate that dropouts do not blame the program for their difficulties.

Feelings About Initial Preparation

Three questions attempted to elicit the students' feelings about their preparation for college work. The first question asked the students to think back to what they were told about CDP and to list those things for

TABLE 23

DEGREE OF SATISFACTION WITH THE COLLEGE DISCOVERY PROGRAM

	Survivors		Dropouts	
Those Who Indicated:	N	%	N	%
I'm fully happy about CDP	98	41	37	22
On the whole, I've been happy about CDP	100	42	80	47
My feelings are about evenly divided	28	12	34	20
I have not been happy about CDP	12	5	20	12
TOTAL	238	100	171	101

$X^2 = 21.98$
$df = 3$
$p<.001$

which they were not sufficiently prepared. Approximately one-fifth of the students in each group said that there was nothing for which they had not been prepared (Table 24). The remaining responsdents gave a wide variety of responses and no one area was mentioned by more than 15% of either group.

Among the most frequently mentioned surprises to students in both groups was the amount of time required for studying. This item was mentioned by 14% of the survivors and by 12% of the dropouts. Later in the report it will be shown that the number of students who actually experienced study problems was much higher than those who indicated that they had not anticipated the difficulty.

Other frequent responses, particularly among dropouts, were the many required courses which they had to take (15%) and the personal and emotional problems which they encountered in adjusting to college life (12%). Survivors tended to stress the amount of testing to which they were subjected (10%). It is unclear whether they were referring to testing by teachers for courses or to tests given by the Research Unit.

TABLE 24

AREAS NOT PREPARED FOR IN
COLLEGE DISCOVERY PROGRAM

	Survivors (204)		Dropouts (170)	
	N	%	N	%
Amount of study time required	28	14	21	12
Courses I'd have to take, that liberal arts curriculum is required	19	9	26	15
Personal or emotional problems in adjusting to college***	5	3	21	12
The amount of testing***	20	10	7	4
General inadequacy of training	12	6	12	7
Summer Program	15	7	7	4
The helpfulness of counselors	14	7	2	1
Stigma toward CD students	11	5	6	4
That CD offered stipends	7	3	8	5
The unhelpfulness of counselors	8	4	5	3
Expenses involved in college	6	3	2	1
There was nothing I was prepared for	19	9	12	7

TABLE 24
(Continued)

	Survivors (204)		Dropouts (170)	
	N	%	N	%
Miscellaneous	13	6	10	6
There was nothing I was not prepared for	40	20	32	19

Note: Multiple response is possible

*** Significant at the .01 level

The second question asked how difficult students found their college work. Although this question failed to differentiate between the two groups of students, the results shown in Table 25 clearly indicate that students generally felt they were not adequately prepared for their college work. About half of the students in each group found college work to be more difficult than expected. Only 18% of the survivors and 15% of the dropouts found the work to be easier than expected.

The third question dealt with the degree of interest which students felt in their college courses. Although equal percentages (50%) of both groups found college work to be more interesting than expected, many more dropouts than survivors found the work to be less interesting (Table 26). Later in the report it will again be shown that motivation towards coursework differentiates dropouts from survivors.

Identification as College Discovery Students

When asked "How many of the community college students not in CDP knew that you were in a special program?" significantly more dropouts than survivors (30% vs. 14%) stated that all or most of the other students knew of their CDP status (Table 27). Similar

TABLE 25

DEGREE OF DIFFICULTY OF COLLEGE WORK IN RELATION TO WHAT WAS EXPECTED

	Survivors		Dropouts	
	N	%	N	%
Much more difficult than expected	28	12	26	15
A little more difficult than expected	82	35	57	34
Neither more nor less difficult than expected	85	36	61	36
Easier than expected	43	18	26	15
TOTAL	238	101	170	100

X^2 = Not Significant

TABLE 26

INTEREST OF COLLEGE STUDIES IN RELATION TO WHAT WAS EXPECTED

	Survivors		Dropouts	
	N	%	N	%
College studies were:				
Much more interesting than expected	68	29	39	23
A little more interesting than expected	57	24	46	27
Neither more nor less interesting than expected	70	29	36	21
Less interesting than expected	43	18	51	30
T O T A L	238	100	172	101

$X^2 = 10.26$
df = 3
$p<.02$

TABLE 27

PERCENTAGE OF NON-CDP STUDENTS WHO KNEW STUDENTS WERE IN CDP

	Survivors		Dropouts	
	N	%	N	%
All or most of the students knew	32	14	51	30
About half of the students knew	60	25	39	23
A few of the students knew	131	56	62	37
None of the students knew	13	6	17	10
TOTAL	236	101	169	100

$x^2 = 23.58$
df = 3
$p < .001$

results were obtained when the students were asked how many of their teachers knew that they were in CDP, i.e., significantly more dropouts than survivors (33% vs. 4%) again stated that all or most of their teachers were aware of their special status (Table 28).

Although responses indicated that dropouts apparently were more self-conscious about their CDP status, dropouts did not differ from surviors in assessment of the way teachers treated students. Neither group felt that their teachers gave them any special help because they were in a special program (Table 29).

Responses to the question asking how students felt about being identified as College Discovery students were classified according to whether they reflected favorable, unfavorable or neutral feelings. The two groups of students seemed to share the same kind of feelings about being identified as CDP members. About one-third of each group gave favorable responses, such as "I feel proud of being chosen" or "I feel good about it." Unfavorable feelings, such as "It's embarassing," "You are treated differently," were expressed by about one-fifth of each group, while the remaining 50% were neutral--"It's ok," "It's no different from the other."

TABLE 28

PERCENTAGE OF TEACHERS WHO KNEW STUDENTS WERE IN CDP

	Survivors		Dropouts	
	N	%	N	%
All or most teachers knew	9	4	55	33
About half of the teachers knew	21	9	26	16
A few of the teachers knew	136	58	57	34
None of the teachers knew	69	29	30	18
TOTAL	235	100	168	101

$X^2 = 72.15$
df = 3
$p < .001$

TABLE 29

DEGREE OF HELP GIVEN BY TEACHERS BECAUSE STUDENTS WERE IN COLLEGE DISCOVERY PROGRAM

	Survivors		Dropouts	
	N	%	N	%
More help to CDP than to others	8	3	10	6
About the same help	223	96	158	94
Less help to CDP than to others	2	1	--	--
TOTAL	233	100	168	100

Major Difficulties While in College

A free response question asked for a description of major difficulties either in the program or outside of college while students were in CDP. The results of this question, shown in Table 30, demonstrate that the great majority of both groups experienced difficulties, but dropouts were more likely to experience difficulties. Nine out of ten dropouts, compared to seven out of ten survivors, mentioned having any problems.

The major difficulties encountered by both groups pertained to study problems. These problems were mentioned by 51% of the dropouts, but by only 30% of the survivors. The nature of the study problems ranged from lack of suitable study facilities in the home to more personal problems, such as inability to budget time adequately.

The second difficulty experienced most often by students in the two groups was "personal and family problem," mentioned by 31% of the dropouts and 18% of the survivors. Although in most instances students failed to identify the specific nature of these problems, other available data suggest that these ranged

TABLE 30

MAJOR DIFFICULTIES ENCOUNTERED WHILE IN THE COLLEGE DISCOVERY PROGRAM

	Survivors (223)		Dropouts (157)	
	N	%	N	%
Study problems	66	30%	80	51%
Problems in study habits: Difficult to concentrate, lack of motivation ****	26	12	59	38
Difficulty in maintaining satisfactory grades	33	15	11	7
Poor study conditions at home	2	1	16	10
Too much school work	7	3	5	3
No place to study at school	4	2	3	2
Personal or family problems ****	40	18	48	31
Financial Problems ***	30	14	38	24
Difficulty with specific courses	25	11	19	12
Insufficient or poor guidance	10	5	8	5
No difficulties ****	64	29	16	10

Note: Multiple response possible

*** Significant at .01 level
**** Significant at .001 level

from interpersonal relations to family problems brought about by external circumstances, such as accidents or sudden illnesses.

A third major problem, mentioned by 24% of the dropouts and by 14% of the survivors, was financial difficulty. Evidently, in spite of the assistance provided by the program and even though many of the students worked, finances were still a source of difficulty.

All of the above differences were statistically significant.

Major Difficulties While in College as Seen in a Fixed Alternative Question

To validate results obtained in the free response questions dealing with difficulties while in college, students were asked to indicate whether certain statements were true for them. This question, in addition to attempting to specify the sources of difficulties experienced by students, also contained other attitudinal statements about the program.

The results for this question, shown in Table 31, are consistent with findings discussed previously. Dropouts generally indicated that they had experienced

TABLE 31

MAJOR DIFFICULTIES WHILE IN CDP AS SEEN IN A FIXED ALTERNATIVE QUESTION

	Percent indicating that statement was mostly true for them					
	Survivors			Dropouts		
	(Base)	N	%	(Base)	N	%
I am not getting enough out of college *	(234)	75	32	(168)	71	42
CDP does not offer the courses I want ***	(236)	40	17	(166)	47	28
I have too many interests outside of school *	(235)	54	23	(167)	54	32
I am not interested enough to do the needed studying****	(235)	58	25	(171)	77	45
When I entered CDP, I really wanted to go to different school	(235)	91	39	(170)	59	35
Even though tuition is free, my family can't afford my attending college	(235)	79	34	(170)	52	31
I want to earn money instead of going to school *	(236)	27	11	(168)	35	21
Because I have job, I can't keep up with school work *	(234)	37	16	(169)	43	25
I think I am going to be taken into armed forces	(234)	27	11	(160)	18	11

TABLE 31 (Continued)

	Survivors			Dropouts		
	(Base)	N	%	(Base)	N	%
I don't know what I want to do with my life ****	(236)	48	20	(169)	68	40
Because of responsibilities at home, I can't keep up with my school work ****	(235)	23	10	(171)	55	32
Problems at home interfered with my doing school work ****	(237)	79	33	(169)	92	54
My own personal difficulties prevent me from doing my school work ***	(234)	101	43	(169)	100	59

* Significant at .05 level
*** Significant at .01 level
**** Significant at .001 level

more difficulties than survivors, and tended to respond with less favorable feelings toward college.

Although a substantial proportion of students in each group felt they were not getting enough out of college, they were not interested enough to do the necessary studying, and CDP did not offer the courses they wanted, the proportion of dropouts who had these problems was significantly higher than the proportion of survivors.

The major difficulties which interfered with the students' school work were identified by dropouts as problems in the home (54%); personal problems, such as uncertainty regarding the future courses their lives should take (40%); responsibilities in the home (32%); other outside interests (32%); or responsibilities at work (25%). Furthermore, although financial need was a major concern for students in the two groups, significantly more dropouts than survivors mentioned their desire to earn money rather than to go to school (21%). In all of these items the proportion of dropouts who experienced these difficulties was significantly higher than survivors, but it should be noted that a substantial number of survivors experienced these same difficulties. For example, one third of the survivors mentioned that problems in the home interfered with their school work and one-fifth mentioned having uncertainty regarding future life goals. Furthermore, one-third of the survivors felt that they were not getting enough out of college and another fifth felt that they were not interested enough to do the necessary studying. An interesting research question would be to determine how many of the survivors who experienced the same motivational, family, and personal problems as dropouts eventually leave the program before completing the degree requirements.

Recommended Changes for the College Discovery Program

Responses to the question "What changes in the College Program do you think might help you with these problems?" indicated that a considerable number of students in each group perceived their problems to be beyond the scope of the program. Approximately four out of ten students in each group felt that there was nothing that could be done within the program to alleviate their problems.

The recommendation for change most often made came from the dropout group. One-fourth of the dropouts felt they should have more latitude in choosing their own courses. The two changes most widely recommended by survivors indicated their concern over academic performance. These students asked for more tutoring (10%) and for better and more counseling on academic problems (13%).

With regard to changes in matters outside of school, the findings reported in Table 32 again confirmed data presented earlier--dropouts tend to experience more family and personal problems than survivors. Significantly more survivors than dropouts mentioned that they had no problems. Dropouts tended to emphasize that an improvement in their family or personal problems (46%) and improvement in their precarious financial situation (23%) could have helped them remain in the program. These recommendations were made by only 17% and 14% of the survivors, respectively.

TABLE 32

RECOMMENDED CHANGES FOR OUTSIDE OF COLLEGE PROGRAM

	Survivors (140)		Dropouts (145)	
	N	%	N	%
Change in family or personal problems ****	24	17	67	46
Improve financial support *	20	14	33	23
More time to study	11	8	10	7
College sponsored activities - contact between students/faculty	2	1	5	3
Out-of-school counseling	2	1	4	3
Better college preparation in high school	6	4	--	--
Miscellaneous	23	16	10	7
Nothing can be done ****	60	43	34	23

NOTE: Multiple response possible
* Significant at .05 level
**** Significant at .001 level

Utilization and Evaluation of College Facilities and Programs

Students were asked to evaluate several college facilities and programs in terms of whether they were "Very good," "adequate," or "poor" in relation to the students' needs. Provision was also made in this question for the students to indicate whether they had made use of the facilities available. The information elicited from this question was analyzed in two ways. First, a comparison was made of the number of respondents in each group who had no experience with facilities, in order to investigate the extent to which the two groups of students differed in the utilization of available facilities. The results for this first type of analysis are shown in Table 33.

More survivors than dropouts made use of existing facilities and programs in the colleges. Approximately 90% or more of the survivors had made use of 10 of the 11 facilities listed. The guidance and counseling service, stipends, and other financial assistance were used by almost all of the students in the survivor group. The only service with which a substantial portion of survivors (approximately one-fifth) had no experience

TABLE 33

EXPERIENCE WITH COLLEGE FACILITIES

	Survivors					Dropouts				
		Experience		No Experience			Experience		No Experience	
	(Base)	N	%	N	%	(Base)	N	%	N	%
Guidance and counseling	(237)	236	99	1	X	(170)	163	96	7	4
Facilities for getting to know other students in CDP	(238)	228	96	10	4	(171)	159	93	12	7
Stipends and other financial assistance	(236)	233	99	3	1	(171)	158	92	13	8
Summer Program	(234)	215	92	19	8	(172)	155	90	17	10
Facilities for getting to know other students not in CD ***	(238)	225	95	13	6	(172)	146	85	26	15
Tutoring Program ****	(234)	190	81	44	19	(170)	112	66	58	34
Student activities program	(238)	212	89	26	11	(169)	126	75	43	25
Library ***	(238)	228	96	10	4	(172)	151	88	21	12

TABLE 33
(Continued)

EXPERIENCE WITH COLLEGE FACILITIES

	Survivors					Dropouts				
	Experience			No Experience		Experience			No Experience	
	(Base)	N	%	N	%	(Base)	N	%	N	%
Facilities for getting to know teachers ****	(238)	217	91	21	9	(172)	128	74	44	26
Lounge and Social area	(237)	222	94	15	6	(172)	156	91	16	9
College study space *	(236)	227	96	9	4	(167)	150	90	17	10

Note: X less than 1%

* Significant at the .05 level
*** Significant at the .01 level
**** Significant at the .001 level

was the tutoring service. Since this group managed to maintain sufficiently high academic averages to remain in college, it seems that the decision not to use tutoring services may have been justifiable.

Six of the eleven facilities were used by 90% or more of the dropouts students, the guidance and counseling service again being used by almost all. However, significantly more dropouts than survivors failed to make use of six of the eleven listed facilities. These were: facilities for getting to know other students not in CD; the tutoring program; the student activities program; the library; facilities for getting to know teachers; and the college study space. The percentages of dropouts failing to use these facilities ranged from 10% for college study space to 34% for tutoring services.

The second analysis, the evaluation of facilities, consisted of a comparison of ratings given by the students who had utilized the service (Table 34). A substantial majority of students in each group considered the following facilities adequate: the guidance and counseling service; stipends or other financial assistance; the summer program; tutoring program; facilities for getting to know other students in CD;

TABLE 34

EVALUATION OF COLLEGE FACILITIES

	Survivors							Dropouts						
	(Base)	Very good		Adequate		Poor		(Base)	Very good		Adequate		Poor	
		N	%	N	%	N	%		N	%	N	%	N	%
Guidance and counseling	(236)	141	60	77	33	18	8	(163)	87	53	55	34	21	13
Facilities for getting to know other students in CD	(228)	90	40	108	47	30	13	(159)	73	46	70	44	16	10
Stipends or other financial assistance ***	(233)	81	35	113	48	39	17	(158)	70	44	62	39	26	17
Summer Program	(215)	79	37	103	48	33	15	(155)	63	41	77	50	15	10
Facilities for getting to know other students not in CD	(225)	87	39	113	50	25	11	(146)	51	35	67	46	28	19
Tutoring program	(191)	65	34	93	49	33	17	(112)	42	38	48	43	22	20
Student activities program	(212)	56	26	116	55	40	19	(126)	36	29	72	57	18	14
Library ****	(228)	31	14	106	47	91	40	(151)	42	28	78	52	31	21

TABLE 34
(Continued)

	Survivors							Dropouts						
	(Base)	Very good		Adequate		Poor		(Base)	Very good		Adequate		Poor	
		N	%	N	%	N	%		N	%	N	%	N	%
Facilities for getting to know teachers	(217)	55	25	86	46	76	35	(128)	28	22	49	38	51	40
Lounge and social area *	(222)	34	15	98	44	90	41	(156)	40	26	64	41	52	33
College Study Space ***	(227)	15	7	78	34	134	59	(140)	23	15	51	34	76	51

* Significant at the .05 level
*** Significant at the .01 level
**** Significant at the .001 level

facilities for getting to know other students not in CD; and the student activities program. A considerable proportion of students in both groups (35% of the survivors and 40% of the dropouts) reported that they had inadequate opportunities to get to know teachers.

The two groups of students disagreed in their evaluation of the remaining college facilities--the library, lounge and social area, and the college study space. Many more survivors reported these facilities to be inadequate. The proportion of survivors who evaluated these facilities as inadequate ranged from 59% for college study space to 40% for the library.

The dissatisfaction expressed by survivors with the college study space and with the library deserves further consideration in light of another finding previously discussed: one of the major difficulties experienced by all students is the inability to study. To compound the problem, many students reported not having suitable study places in the home. It is especially important that future research specify the inadequacy of the college study space and the library so that constructive action be taken in these areas.

Section VI

REACTIONS TO THE SUMMER PROGRAM

After graduation from high school, all students accepted for the College Discovery Program were required to attend a summer session at their community colleges. The summer session, which provided remedial classes as well as orientation to the college environment, was the CDPs' first introduction to college. Since this initial experience might play a crucial role in the students' later college careers, questions were asked regarding their impressions about the summer program.

Feelings About The Summer Program

Students were asked to indicate whether they agreed with each of several statements about the summer session. Table 35 reports the percentage of each group responding that the statements were "mostly true."

By and large, both groups of students shared the same impressions about the summer program. Of particular importance was the discovery that less than half of the students in each group felt that the summer sessions had prepared them for college. This finding is somewhat paradoxical in view of the data presented

TABLE 35

FEELINGS ABOUT THE CDP SUMMER PROGRAM

Percent Responding That
Statement Is Mostly True

	Survivors (234)		Dropouts (169)	
	N	%	N	%
A course in study habits ought to be given before entering CDP	185	79	139	82
Too many psychological tests were given during the summer ***	142	61	77	46
I would like to get a job this summer rather than go to summer school	143	61	NA	NA
Summer school teachers took more of an interest in students than teachers do now	124	53	98	58
Summer session courses prepared me for college	101	43	80	47

Note: NA - Question was not asked
*** Significant at the .01 level

earlier, mainly that the substantial majority of students felt that the summer program was adequate. On the other hand, the finding is consistent with the overall feeling expressed by students that college work was more difficult than expected. One possible explanation is that although the students were satisfied with the quality and content of the summer program, they later became very much aware of their academic deficiencies and felt the need for more intensive remedial help.

A substantial majority in each group felt that "a course in study habits ought to be given before entering CDP," a finding previously suggested by the report of major difficulties in study skills. Over half of both groups perceived summer teachers as more interested in the students than the regular teachers.

Only attitudes about psychological testing yielded significant differences between groups. More survivors than dropouts felt that too many psychological tests were given during the summer.[10] Survivors may, in fact, have been present for more of the post-summer testing, and thus may have felt over-tested in general.

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[10] The number of tests administered to subsequent classes of CDPs has been reduced appreciably.

Desire For Additonal Remedial Courses

That students feel the need for more intensive remedial help was clearly demonstrated by their responses to a question asking about additional summer remedial courses. Over two-thirds of students in each group felt the need for additional courses in English composition and grammar, mathematics, and reading. And at least four out of ten students in both groups desired additional courses in foreign languages, science, history, and speech (Table 36).

Significantly more survivors than dropouts desired additional courses in English composition and grammar. Many more dropouts than survivors, on the other hand, desired more remediation in history. A likely explanation for why the two groups differed is that survivors, as a consequence of their longer college careers, became aware that English composition and grammar are essential skills for academic success, whereas history courses are not required beyond the freshman year.

TABLE 36

ADDITIONAL REMEDIAL COURSES THAT SHOULD BE OFFERED DURING THE CD SUMMER PROGRAM

	Percent Responding Yes					
	Survivors			Dropouts		
	(Base)	N	%	(Base)	N	%
English Composition and Grammar *	(234)	190	81	(171)	123	72
Mathematics	(230)	176	77	(180)	137	81
Reading	(231)	160	69	(170)	113	67
Foreign Language	(232)	129	57	(170)	104	61
Science	(232)	120	52	(170)	100	59
History ***	(228)	86	38	(170)	92	54
Literature	(228)	104	46	(171)	86	50
Speech	(229)	108	47	(170)	72	42

* Significant at the .05 level
*** Significant at the .01 level

Section VII

REACTIONS TO THE COUNSELING AND GUIDANCE SERVICE

Counseling was one of the major services provided by the College Discovery Program. Each student was assigned to a counselor for guidance on both academic and personal problems. Due to the crucial role that counselors can play in helping students adjust to college life, several questions were asked to investigate students' feelings and reactions toward these services.

Reasons for Visiting the Counselor: First Year

Respondents were given a list of possible reasons for visiting a counselor and were asked to indicate how often they saw a counselor for each of the listed reasons. They were asked to do this separately for the first and second year. One purpose of these questions was to gain a picture of the type of problems discussed with counselors during different stages of the students' careers. Secondly, we were interested in knowing whether the two groups of students differed in the nature of the problems perceived as critical enough to warrant discussion with counselors.

The reasons for visiting counselors during the first year and the frequency of these visits are reported in Table 37. During the first year, the most common reason for seeing a counselor was for introduction--"to get to know each other"; almost all the students in each group (93% of the survivors and 91% of the dropouts) saw the counselor at least once for this purpose. Discussion of academic problems was the second most frequent reason for visiting counselors; 89% of the survivors and 86% of the dropouts saw the counselor at least once for this reason. Fewer students visited the counselor to talk about personal problems, administrative matters, or financial aid, the last topic being the only one which over half of the students in each group did not discuss at all.

Visits to the counselor for any one reason were generally confined to no more than three during the first year. The most notable exception was the frequency of visits for academic problems--the one area which students (or counselors) felt the most pressing need to discuss repeatedly. Forty-two percent of the survivors and 47% of the dropouts saw the counselor four times or more to discuss academic problems.

TABLE 37

REASONS FOR VISITING A COUNSELOR AND FREQUENCY OF VISITS DURING FIRST YEAR

	Survivors		Dropouts	
	N	%	N	%
To Get To Know Each Other				
	(219)		(163)	
No visits	16	7	15	9
1-3 times	135	62	110	68
4-6 times	35	16	24	15
7 or more	33	15	14	9
To Talk About Academic Problems				
	(219)		(163)	
No visits	25	11	22	14
1-3 times	102	47	65	40
4-6 times	53	24	47	29
7 or more	39	18	29	18
To Talk About Financial Aid				
	(215)		(167)	
No visits	115	54	91	55
1-3 times	80	37	61	37
4-6 times	8	4	10	6
7 or more	12	6	5	3

TABLE 37 (Continued)

	Survivors		Dropouts	
	N	%	N	%
To Talk About Other Personal Problems *	(217)		(168)	
No visits	106	49	63	38
1-3 times	72	33	57	34
4-6 times	17	8	25	15
7 or more	22	10	23	14
To Talk About Administrative Matters	(213)		(166)	
No visits	85	40	71	43
1-3 times	105	49	72	43
4-6 times	17	8	16	10
7 or more	6	3	7	4

* Significant at the .05 level

Approximately one-fifth of each group made at least seven visits for this purpose.

With regard to differences between the two groups of students, it was reported earlier that dropouts more frequently mentioned personal problems as a major difficulty while attending college. The number of counseling visits for this purpose bears out the earlier finding. Sixty-two percent of dropouts, in contrast to one-half of the survivors, met a counselor at least once to discuss personal problems. Dropouts also tended to make more frequent visits to the counselors to discuss their personal problems. During the second year, these trends changed.

Reasons for Visiting the Counselor: Second Year

Reasons for visiting the counselor the second year differed somewhat from the first year. As would be expected, fewer students in both groups went to the counselor to introduce themselves in the second year (Table 38). Academic problems became the most common topic during the second year. The overwhelming majority of students in the two groups (91% of the survivors and 80% of the dropouts) visited the counselor at least

TABLE 38

REASONS FOR VISITING A COUNSELOR AND FREQUENCY OF VISITS DURING SECOND YEAR

	Survivors		Dropouts	
	N	%	N	%
	(210)		(78)	
To Get To Know Each Other				
No visits	80	38	35	45
1-3 times	85	41	33	42
4-6 times	18	9	2	3
7 or more times	27	13	8	10
To Talk About Academic Problems *				
	(215)		(79)	
No visits	19	9	16	20
1-3 times	112	52	31	39
4-6 times	46	21	16	20
7 or more times	38	18	16	20
To Talk About Financial Aid				
	(215)		(80)	
No visits	124	58	43	54
1-3 times	72	34	28	35
4-6 times	10	5	3	4
7 or more times	9	4	6	8
To Talk About Personal Problems				
	(210)		(79)	
No visits	92	44	40	51
1-3 times	73	35	18	23
4-6 times	22	11	10	13
7 or more times	23	11	11	14

TABLE 38 (Continued)

	Survivors		Dropouts	
	N	%	N	%
To Talk About Administrative Matters **				
	(210)		(80)	
No visits	64	31	36	45
1-3 times	126	60	33	41
4-6 times	12	6	4	5
7 or more times	8	4	7	9

* Significant at the .05 level
** Significant at the .02 level

once for this reason. As during the first year, this was the area which elicited the greatest number of repeat visits. Three out of ten survivors and four out of ten dropouts saw the counselor four times or more to discuss academic problems.

Administrative problems, such as change of curriculum or dropping courses, were the second most frequently discussed topic during the second year. The other reasons for visiting the counselor were to get to know each other, to discuss personal problems, and to discuss financial aid, in that order.

No significant differences were found in the proportions of survivors and dropouts who visited counselors to discuss personal problems. In fact, as indicated in Table 39, the proportion of dropouts who discussed personal problems was significantly lower during the second year than during the first. Among students still enrolled in the second year, approximately one-half did not discuss personal problems with the counselors, as opposed to only 38% during the first year. This difference was statistically significant at the .05 level. By the second year, many students may have lost faith in the counselors' ability to help them with their personal problems.

Significant differences in the frequency of discussion of academic and administrative problems during

TABLE 39

PERCENTAGES OF DROPOUT STUDENTS WHO VISITED COUNSELORS TO DISCUSS PERSONAL PROBLEMS DURING THE FIRST AND SECOND YEARS

	Dropouts Who Visited Counselors During:			
	First Year		Second Year	
	N	%	N	%
No visits	63	38	36	45
1 - 3	57	34	33	41
4 or more	48	29	11	14
TOTAL	168	101	80	100

$X^2 = 6.6$
df = 2
$p < .05$

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the second year emerged between the groups. Among those enrolled during the second year, significantly more survivors visited the counselors at least once to discuss academic (91% vs. 79%) and administrative (69% vs. 55%) difficulties. However, twice as many dropouts went seven times or more to discuss their academic difficulties. This latter finding suggests that the academic problems of survivors are different in kind and/or intensity from those of dropouts in that they require less extensive help from counselors.

Experiences With Counselors

Both groups of students responded favorably to their contacts with counselors. An overwhelming majority felt that in contacts concerning personal problems (Table 40) the counselor was there when needed, had let the students talk about whatever they wanted, had understood the problems, and gave good advice.

Survivors more frequently reported that they understood what the counselors said to them and that talking to the counselor really helped them. Survivors also tended to give more favorable ratings on the other items, although none of the other differences be-

TABLE 40

STUDENT EXPERIENCES WITH COUNSELORS WHEN DISCUSSING PERSONAL PROBLEMS

	Survivors			Dropouts		
	(Base)	N	%	(Base)	N	%
The counselor was there when I needed to see him	(231)	200	87	(166)	137	83
He let me talk about whatever I wanted to with him	(230)	208	90	(164)	143	87
The counselor understood my problems	(223)	183	82	(160)	119	74
I felt he cared about what happened to me	(228)	202	89	(164)	141	86
I understood what the counselor said to me ***	(230)	223	97	(162)	147	91
The counselor gave me good advice	(228)	203	89	(161)	134	83
Talking to the counselor really helped me **	(225)	180	80	(164)	113	69

** Significant at the .02 level
*** Significant at the .01 level

tween survivors and dropouts were statistically significant.

Counseling assistance for academic problems was received as favorably as assistance for personal problems (Table 41). Counselors' performance was given the most favorable rating on all of the items by over two-thirds of the students. Significantly more survivors than dropouts felt that the counselors understood their problems, that they understood what counselors said to them, and that talking with the counselors really helped.

Thus, although dropouts apparently appreciated counselors' efforts to help them with personal and academic problems, counselors may have been slightly more successful with survivors. The most critical difference between survivors and dropouts seemed to be in communication to counselors; survivors more frequently felt they understood what the counselor said to them, and counselors understood their problems. There seemed to be poorer communication between counselors and dropout students. Strategies, therefore, need to be devised to improve communication between counselors and potential dropout students.

TABLE 41

STUDENT EXPERIENCES WITH COUNSELORS WHEN DISCUSSING ACADEMIC PROBLEMS

	Survivors			Dropouts		
	(Base)	N	%	(Base)	N	%
The counselor was there when I needed to see him	(236)	214	91	(159)	134	84
He let me talk about whatever I wanted to with him	(234)	211	90	(156)	131	84
The counselor understood my problems ***	(233)	205	88	(155)	120	77
I felt he cared about what happened to me	(230)	211	92	(155)	141	91
I understood what the counselor said to me ***	(235)	225	96	(157)	138	88
The counselor gave me good advice	(232)	211	91	(153)	131	86
Talking to the counselor really helped me ****	(228)	185	81	(154)	101	66

*** Significant at the .01 level
**** Significant at the .001 level

Suggested Changes in CDP Counseling

Students were asked what changes they would recommend for the College Discovery counseling and guidance program (Table 42). The generally favorable response to the counselors noted earlier can also be seen in the high proportion of students in each group (51% of survivors and 43% of dropouts) who said that there was nothing they would like to change. In keeping with other findings of the study, this favorable response tended to be more pronounced among survivors than among dropouts.

Among the changes suggested, the most frequently mentioned was for counselors more understanding and knowledgeable about problems such as scholarships and curriculum. Survivors also suggested enlargement of the counseling program. Dropouts, on the other hand, were interested in smaller group meetings and more individual meetings with counselors.

Although several other changes were suggested, none of them were named by more than nine percent of either group. Additional recommendations were for more information on courses and registration, more group meetings, and regularly scheduled meetings with

TABLE 42

SUGGESTED CHANGES IN CD
COUNSELING AND GUIDANCE PROGRAM

	Survivors (191)		Dropouts (153)	
	N	%	N	%
References to counselor's performance	32	17	38	25
Get counselors more interested in CD students; more understanding of student needs *	16	8	25	16
Get more knowledgeable counselors	12	6	7	5
Counselors should not make so many decisions, should give more freedom	2	1	8	5
Change counselors	3	2	3	2
Enlarge the program, have more counselors available	31	16	14	9
Smaller group meeting; more individual meetings	15	8	18	12
More curriculum, course, and registration information and guidance **	5	3	13	9
Have regularly scheduled meetings	2	1	5	3
More group meetings	5	3	1	1

TABLE 42 (Continued)

	Survivors (191)		Dropouts (153)	
	N	%	N	%
Help motivate students more	-	-	4	3
Keep student informed as to his academic standing	-	-	1	1
Miscellaneous	9	5	9	6
There is nothing I would like to see changed	97	51	66	43

Note: Multiple response is possible
* Significant at the .05 level
** Significant at the .02 level

counselors. In addition, four dropout students wanted to receive help with their motivational problems, and one dropout student would have liked to be informed more often about his academic standing.

Section VIII

REACTIONS TO THE TUTORING PROGRAM

Another important service provided to College Discovery students was the tutoring program. This service was designed to assist students to overcome their initial educational handicaps and to supplement the summer remedial courses. The tutoring services were available throughout the students' college careers.

Experience With Tutoring Services

As indicated in Table 43, almost everyone had heard of at least one of the available tutoring services. Most students were familiar with individual tutoring services provided by other students or by teachers. Less well known to both groups of students were the group tutoring services.

Although survivors were more likely to have heard about individual tutoring services given by students, and dropouts were more likely to have heard about tutoring groups run by students, these findings did not seem to have any relevance to the actual utilization of these two specific services by either group. This finding is demonstrated in Table 44, which shows

TABLE 43

PROPORTION OF STUDENTS WHO HEARD ABOUT TUTORING SERVICES

	Survivors (236)		Dropouts (169)	
	N	%	N	%
Individual help by student tutors *	210	89	136	81
Individual help by teachers	174	74	111	66
Tutoring groups run by teachers	113	48	86	51
Tutoring groups run by students *	96	41	86	51
Private tutor not connected with school	89	38	61	36
Had not heard about tutoring services	4	2	7	4

* Significant at the .05 level

the different types of tutoring which students actually used throughout the first year.

As was indicated earlier, of all the college facilities the tutoring services were the least utilized by either group, and especially by dropouts. Approximately one-fifth of the survivors and one-third of the dropouts did not make use of any tutoring services throughout their college experience. This difference was statistically significant at the .001 level.

Table 44 also shows that among both survivors and dropouts who did use the services, most tutoring was done on an individual basis by either students or teachers.

Table 45 shows the number of academic subjects in which students were tutored during the first year. Significantly more dropouts were tutored in three subjects; survivors were more likely to be tutored in only one subject.

Dropouts were also tutored more hours than survivors (Table 46). Whereas 30% of the dropouts who utilized tutoring services received 41 hours or more of tutoring, only 11% of the survivors required so much tutoring. These findings underline the extensiveness of the academic problems of dropouts and suggest

TABLE 44

TUTORING SERVICE USED DURING FIRST YEAR

	Survivors (234)		Dropouts (170)	
	N	%	N	%
Individual help by student tutors	112	48	66	29
Individual help by teachers *	113	48	65	38
Tutoring groups run by teachers	57	24	45	27
Tutoring groups run by students	21	9	17	10
Private tutor not connected with school *	26	11	8	5
Had not used a tutoring service ****	44	19	58	34

* Significant at the .05 level
**** Significant at the .001 level

TABLE 45

NUMBER OF SUBJECTS IN WHICH STUDENTS WERE TUTORED DURING FIRST YEAR

	Survivors		Dropouts	
	N	%	N	%
One subject	108	73	63	61
Two subjects	36	25	28	27
Three subjects	3	2	12	12
Total	147	100%	103	100%

$x^2 = 10.83$
df = 2
$p < .001$

TABLE 46

NUMBER OF HOURS STUDENTS WERE TUTORED DURING FIRST YEAR

	Survivors		Dropouts	
	N	%	N	%
1 to 5 hours	36	32	20	24
6 to 15 hours	37	32	18	21
16 to 40 hours	28	25	21	25
41 hours or more	13	11	25	30
Total	114	100%	84	100%

$x^2 = 11.65$
$df = 3$
$p < .01$

that some dropouts tried to overcome their deficiencies.

The subjects in which students were most often tutored were mathemathics, English (composition, grammar, and literature) and languages (Table 47). Dropouts, however, were more likely than survivors to be tutored in mathematics and history.

Tutoring services during the second year will not be discussed in this paper since many dropouts left during the first year and, among those who remained, only very few responded to the questions on tutoring.

Ways in Which Tutoring Was Helpful To Students

While the majority of students in both groups felt that tutoring had helped them understand their college work, more dropouts than survivors gave favorable evaluations of tutoring (Table 48). Only a small number of students in both groups felt that tutoring had brought them closer to their teachers, had improved their study habits, or had given them greater confidence in handling their college work. Small percentages of students in both groups (14% in each) felt that tutoring had not been helpful at all.

TABLE 47

SUBJECTS IN WHICH STUDENTS WERE TUTORED DURING FIRST YEAR

	Survivors (147)		Dropouts (103)	
	N	%	N	%
Received tutoring in:				
Math, Calculus, Algebra ***	68	46	65	63
English, Literature	43	29	34	33
Languages (French, Spanish)	43	29	25	24
Social studies, history ***	4	3	13	13
Science, physics, chemistry	19	13	10	10

*** Significant at the .01 level

TABLE 48

WAYS IN WHICH TUTORING WAS HELPFUL TO STUDENTS

	Survivors (175)		Dropouts (95)	
	N	%	N	%
Helped me to understand college work *	114	65	73	77
Helped one to understand specific course (named)	42	24	23	24
Brought me closer to the teacher	7	4	7	7
Improved my study habits; helped me to prepare papers	12	7	3	3
Gave me greater confidence to finish school	2	1	3	3
Tutoring did not help	25	14	13	14

Note: Multiple response possible

* Significant at the .05 level

Additional Tutoring Desired

Approximately half of the students in each of the groups wanted more tutoring in mathematics and foreign languages, and at least one-third of each group also felt the need for more tutoring in Science, English composition and grammar, and history (Table 49). Close to twenty percent in each group desired additional tutoring in reading, literature and speech.

In spite of the fact that dropouts reported receiving a substantial amount of tutoring in mathematics and history--significantly more than survivors--they desired still further help in these subjects, again more than survivors desired. Evidently, dropouts felt their educational deficiencies in history and mathematics were not overcome by the summer remedial courses or the tutoring services provided throughout the school year.

Recommendations for Changes in Tutoring Services

When asked to suggest changes in the tutoring program, slightly over one-third of the students in each group did not recommend any changes at all. As indicated in Table 50, the most frequently mentioned sug-

TABLE 49

SUBJECTS IN WHICH STUDENTS WOULD LIKE ADDITIONAL TUTORING

	Survivors (189)		Dropouts (143)	
	N	%	N	%
Mathematics *	94	49	87	60
Foreign Language	88	47	81	57
Science	83	44	51	36
English Composition and grammar	62	33	59	41
History *	52	28	55	39
Reading	35	19	37	26
Literature	43	23	30	21
Speech	35	19	26	18

* Significant at the .05 level

TABLE 50

RECOMMENDED CHANGES IN THE TUTORING PROGRAM

	Survivors (166)		Dropouts (109)	
	N	%	N	%
More time for tutoring; establish certain hours for tutoring *	21	13	25	23
Have more specialized, better trained tutors	24	15	13	12
Have more individual tutoring	6	4	8	7
Make tutoring program better known	11	7	7	6
Expand tutoring program-not further specified	7	4	6	6
Have more group tutoring sessions	4	2	5	5
Offer tutoring in more courses	8	5	3	3
Have more student/volunteer tutors	6	4	1	1
No changes suggested	61	37	39	36

* Significant at the .05 level

gestion, given more often by dropouts, was additional tutoring hours. Twenty-three percent of the dropouts and 13% of the survivors felt there should be more hours of tutoring and that these should be scheduled regularly. Fifteen percent of the survivors and 12% of the dropouts would have liked better trained tutors. Other recommendations, suggested by 7% or less of the students, called for expansion of tutoring services; more individual sessions, additional group sessions, more student tutors, and coverage of additional subjects.

Section IX

STUDY HABITS OF COLLEGE DISCOVERY STUDENTS

An essential skill for academic success is adequate study habits. Students must learn how to budget their time adequately, how to read textbooks, how to take lecture notes, how to review for examinations, and how to tackle difficult subjects. Adequate facilties conducive to studying must be available. Yet, as previously indicated, College Discovery students complained that they were not prepared for the amount of studying required in college. They reported that among the major difficulties in college were studying problems and study facilities at home and at college.

In this section a further exploration of the study habits of College Discovery students will be made.

Course in Study Habits

Apparently many students did not have confidence in their ability to study sufficiently well to be successful in college. Eight out of ten students in each group felt that they should have attended a course in study habits before entering college.

Hours of Study Per Week

Students were asked, "Not counting the hours you spent in class, how many hours per week did you spend studying and doing homework?" The results shown in Table 51 indicate that dropouts studied significantly fewer hours per week than survivors. Sixty-four percent of the dropouts claimed to have studied fifteen hours or less per week, while 43% of the survivors studied so little ($X^2 = 17.17$, df = 1, $p < .001$).

Dropouts realized that they studied less than other students. When asked "How would you say the amount of studying and homework that you did for college compared to the amount other students at the community college did?" sixty percent of the dropouts claimed that they were studying less. This proportion was twice as high as that of survivors (Table 52).

Places of Study

A question was also asked regarding proportions of study time spent in different locations (Table 53). Proportions of study time spent in different locations varied between survivors and dropouts. Although both

TABLE 51

NUMBER OF HOURS PER WEEK SPENT STUDYING

	Survivors		Dropouts	
	N	%	N	%
Less than 15 hrs.	101	43	110	64
15 hrs. and more	133	57	62	36
TOTAL	234	100	172	100

$x^2 = 17.17$
df = 1
$p < .001$

TABLE 52

AMOUNT OF STUDYING COMPARED TO OTHER STUDENTS

	Survivors		Dropouts	
	N	%	N	%
Much more time	9	4	6	4
A bit more time	33	14	15	9
About the same amount of time	121	52	46	27
Less time	57	24	76	45
Much less time	15	6	25	15
Total	235	100	168	100

$X^2 = 36.06$
$df = 4$
$p < .001$

TABLE 53

PROPORTIONS OF STUDY TIME SPENT AT DIFFERENT LOCATIONS

	Survivors		Dropouts	
At own home ****	N	%	N	%
All or most	152	64	73	42
About half	59	25	53	31
A little	23	10	38	22
None	4	2	8	5
Total	238	101	172	100
Public library ****	N	%	N	%
All or most	18	8	9	5
About half	61	26	29	17
A little	120	51	82	48
None	37	16	52	30
Total	236	101	172	100
School library	N	%	N	%
All or most	12	5	16	9
About half	33	14	28	16
A little	134	57	95	55
None	57	24	33	19
Total	236	100	172	99

TABLE 53 (Continued)

	Survivors		Dropouts	
College study space	N	%	N	%
All or most	4	2	9	5
About half	27	12	27	16
A little	107	46	74	44
None	96	41	59	35
Total	234	101	169	100
Lounge ***	N	%	N	%
All or most	2	1	9	5
About half	10	4	16	9
A little	57	25	59	29
None	163	70	97	56
Total	272	100	101	99
Train or bus	N	%	N	%
All or most	4	2	7	4
About half	14	6	11	6
A little	119	51	84	49
None	97	42	69	40
Total	234	101	171	99

TABLE 53 (Continued)

	Survivors		Dropouts	
At a friend's home	N	%	N	%
All or most	5	2	1	1
About half	8	3	14	8
A little	54	23	26	15
None	166	71	128	76
Total	233	99	169	100

*** Significant at .01 level
**** Significant at .001 level

groups mentioned home as the most commonly used place of study, significantly more survivors studied at home. Perhaps for both groups home was the most desirable place to study, but circumstances in the homes of the survivors may have been more conducive to successful study. More survivors also studied at public libraries. Dropouts were more likely to study in the college study space or in the lounge. It was reported earlier that the college study space was considered to be inadequate by survivors. The lounge certainly is not designed for study. This choice of study place may contribute to the dropouts' lower average study time.

Section X

RELATIONSHIPS WITH PEERS

The peer culture of College Discovery students is of interest both for its own sake and because of its influence on educational attitudes. It is a common observation that peers influence both behavior and attitudes. By reinforcing or undermining positive attitudes toward higher education, peers may be a crucial factor in determining a student's ultimate success or failure in college. The achievement of a satisfactory adjustment with one's social group is an important facet of one's total adjustment to college. College Discovery Program students are doubly handicapped in their social adjustment because: (1) they must contend with an inadequate educational background, and (2) they must contend with limited financial resources and an impoverished home setting.

Various aspects of the peer relationships of College Discovery students are explored in this section.

How Important Getting Along Well With Friends Is To The Students

As part of a longer question designed to tap student values (See Section IV), students were asked to indicate whether they considered getting along with friends "very important," "somewhat important," or "not so important." The results indicate that the preponderance of students in the two groups considered this goal of some importance. Only 7% of survivors and 8% of dropouts thought that getting along with friends was not important.

Utilization of College Facilities or Programs for Peer Relationships

Almost all the students in both groups had participated in programs for getting to know other students in CDP (96% of survivors and 93% of dropouts) and had used the lounge and social area (94% of survivors and 91% of dropouts). However, significantly more survivors than dropouts had experience with facilities for getting to know students other than those in CDP (94% vs. 85%) and participated in the student activities program (89% vs. 75%). As initially indicated in Section VI, the less extensive utilization of these facilities by dropouts may be a function of the shorter time spent in the program. However, the finding may also reflect college policies which discourage students from participating in extra-curricular activities until it is ascertained that their academic standing will not be seriously jeopardized.

Evaluation of College Facilities for Peer Relationships

Among survivors and dropouts who had experience with College facilities and programs for peer relationships, there were generally no differences in the evaluation of these facilities (Table 54). The only exception was the evaluation of the lounge and social area. More survivors than dropouts evaluated this facility as "poor" (41% vs. 33%), and conversely more dropouts than survivors evaluated it as "very good" (26% vs. 15%).

With regard to other facilities or programs for peer relations, a substantial majority of students in each group considered them to be at least adequate.

TABLE 54

EVALUATION OF COLLEGE FACILITIES FOR PEER RELATIONSHIPS

	Survivors (238)				Dropouts (171)			
	(Base a)	Very Good	Adequate	Poor	(Base a)	Very Good	Adequate	Poor
Student activities program	(212)	26%	65%	19%	(126)	29%	57%	14%
Facilities for getting to know CDP Students	(228)	40%	47%	13%	(159)	46%	44%	10%
Facilities for getting to know students not in CD	(225)	39%	50%	11%	(146)	35%	46%	19%
Lounge and social area *	(222)	15%	44%	41%	(156)	26%	41%	33%

Note: a Those who utilized facilities

*Significant at the .05 level

College Status of Friends Outside of School and CDP Status of Friends Inside of School

Table 55 reports the distribution of responses to the question "How many of your friends outside of school have been to or are in college?" Contrary to our expectations, significantly more dropouts than survivors claimed that all or most of their friends outside of school had been to college.

The students were also asked to indicate the number of friends at their college who were in CDP. Over twice as many dropouts as survivors stated that all or most of their friends in college were CDP students (Table 56). These data suggest the possibility that friendships and social activity within CDP and with other college students may have had a severely detrimental effect on dropouts. Rather than aiding in developing proper attitudes toward school work, social relations among dropouts may have drained away energy to less beneficial goals.

Perception of the Effects of College Discovery Status on CDP Students' Relations With Non-CDP Students

Table 57 shows the distribution of responses to the question "What difference has your being in CDP

TABLE 55

NUMBER OF FRIENDS OUTSIDE OF SCHOOL WHO HAVE BEEN TO COLLEGE

	Survivors		Dropouts	
	N	%	N	%
All or most	41	17	49	29
About half	66	28	52	30
A few	110	46	55	32
None	20	8	15	9
Total	237	99	171	100

$X^2 = 11.03$
df = 3
$p < .05$

TABLE 56

NUMBER OF FRIENDS IN COLLEGE WHO ARE IN THE COLLEGE DISCOVERY PROGRAM

	Survivors		Dropouts	
	N	%	N	%
None	3	1	3	2
A few	56	24	30	18
About half	132	56	59	35
All or most	43	18	72	43
No friends in college	1	*	5	3
Total	235	99	169	101

$x^2 = 35.84$
df = 4
$p < .001$

* Less than .5%

TABLE 57

PERCEPTION OF THE EFFECTS OF COLLEGE DISCOVERY STATUS ON CDP STUDENTS' RELATIONS WITH NON-CDP STUDENTS

	Survivors		Dropouts	
	N	%	N	%
Because I am in CDP, other students have been:				
Cool and unfriendly	5	2	9	6
Warm and friendly	2	1	2	1
It has not mattered to other students	224	97	152	93
Total	231	100	163	100

made in your relations with students who were _not_ in CDP?"

Almost all the survivors (97%) and dropouts (93%) indicated that their being in the program did not affect their relations with non-CD students. The very few students who felt that their status as CDP students affected their relationship to other students generally perceived other students to be cold and unfriendly.

Change in Dating and Friendship Pattern

Table 58 reports the responses to items concerning changes in the frequency of dating and in other time spent with friends since entering college. There were no significant differences between survivors and dropouts in the amount of time spent dating or in time spent with friends other than dates.

TABLE 58

SHIFT IN FREQUENCY OF ACTIVITIES INVOLVING PEERS

	Survivors		Dropouts	
	N	%	N	%
Dating				
More	68	29	64	38
Same	82	35	59	35
Less	82	35	45	27
Total	232	99	168	100

X^2 = Not significant

	Survivors		Dropouts	
	N	%	N	%
Seeing Friends Other Than Dates				
More	54	23	50	29
Same	82	35	57	33
Less	100	42	64	37
Total	236	100	171	99

X^2 = Not significant

Section XI

CHANGES ATTRIBUTED TO COLLEGE ATTENDANCE

Several questions attempted to elicit the students' views of how college attendance and experiences had affected their perception of themselves, their interests, activities, and attitudes. It is to be noted that many of the indicated changes might have occurred regardless of college attendance because of increased maturity and experience.

Changes in Self-Perception Attributed to College

Students were asked "In what ways has your CDP experience made you think differently about yourself?" (Table 59). Even though some dropouts left college, they apparently developed a great interest in education. Their separation from college may even have made them more aware of the value of education than the survivors. Approximately two-thirds of the dropouts, in contrast to 40% of the survivors, felt that being in the College Discovery Program had expanded their intellectual and career horizons. Half of the survivors, on the other hand, reported greater self-confidence as a result of

TABLE 59

CHANGES IN SELF-PERCEPTION ATTRIBUTED TO EXPERIENCES IN THE COLLEGE DISCOVERY PROGRAM

	Survivors (230)		Dropouts (165)	
	N	%	N	%
Expanded intellectual and career horizons ****	93	40	106	64
Greater self confidence ****	113	49	53	32
Deeper self awareness	99	43	76	46
Have better outlook on society	61	27	33	20
Improved inter-personal understanding	53	23	29	18
Has lessened self-esteem	11	5	10	6
CDP has not affected me	11	5	13	8

Note: Multiple response is possible

**** Significant at .001 level

college attendance, significantly more than the 32% of dropouts who felt greater self-confidence. Lack of confidence among dropouts may be due to the fact that more dropouts had academic problems--in many cases aggravated by situations over which they had no control but which contributed to failure in the academic environment.

Other changes mentioned by substantial percentages of both groups were a deeper awareness of self, a better outlook on society, and improved interpersonal relationships. Only 5% of the survivors and 6% of the dropouts felt that the college experience had lowered their self-esteem. Very few students felt that CDP had no effect on them.

Changes in Leisure Time Activities

Sixteen leisure time activities, including listening to records, dating, and watching television, were listed, and respondents were asked to indicate whether they were spending more, less, or the same amount of time in these activities as they did before entering college.

Significant differences were found between survivors and dropouts on ten of the items (Table 60). Significantly

TABLE 60

CHANGES IN LEISURE TIME ACTIVITIES SINCE ENTERING COLLEGE

	Survivors						Dropouts					
Time Spent In:	More		Same		Less		More		Same		Less	
	N	%	N	%	N	%	N	%	N	%	N	%
Reading A Book Required for College ****	72	31	66	28	98	42	116	68	27	16	27	16
Reading a Magazine ***	96	41	81	34	59	25	97	57	43	25	31	18
Attending a Museum, Lecture or Concert ****	99	42	76	32	60	26	48	28	51	30	71	42
Reading a Newspaper **	112	48	80	34	43	18	102	59	43	25	27	16
Dating	68	29	82	35	82	35	64	38	45	27	59	35
Listening to Records *	51	22	73	31	112	48	57	33	44	26	70	41
Athletics or Hobbies	53	23	84	36	98	42	46	27	58	34	66	39
Seeing Friends Other Than Dating	54	23	82	35	100	42	50	29	57	33	64	37
At Club or Social Group Meetings ***	50	21	87	37	97	42	22	13	55	33	92	54
Attending Sports Events	46	20	85	37	102	44	30	18	61	36	78	46

TABLE 60
(Continued)

Time Spent In:	Survivors						Dropouts					
	More		Same		Less		More		Same		Less	
	N	%	N	%	N	%	N	%	N	%	N	%
Being With Your Family ****	29	90	116	12	38	49	45	26	54	32	72	42
Going to Movies	28	12	75	32	133	56	30	17	51	30	91	53
Attending Religious Services *	20	9	114	49	100	43	26	15	84	49	62	36
In Community Activities Or Organization **	24	10	111	47	100	43	16	10	60	36	90	54
Watching Television *	16	7	51	22	169	72	21	12	43	25	108	63
Listening to Radio	62	26	74	31	100	42	54	32	54	32	63	37

* Significant at .05 level
** Significant at .02 level
*** Significant at .01 level
**** Significant at .001 level

more dropouts than survivors reported that they were spending more time in the following activities:

(1) Reading books not required for college
(2) Reading magazines
(3) Reading newspapers
(4) Listening to records
(5) Watching television
(6) Spending time with their families
(7) Attending religious services.

On the other hand, significantly more survivors than dropouts reported that they were spending more time:

(1) Going to museums, attending lectures or concerts
(2) Attending clubs or other social group meetings.

More dropouts than survivors also reported spending less time in community activities or organizations.

No marked differences or changes were noted for the following activities:

(1) Dating
(2) Engaging in athletics or hobbies
(3) Seeing friends other than dates
(4) Attending sports events

(5) Going to the movies

(6) Listening to the radio.

Many of the significant differences between the two groups of students may merely reflect the fact that many dropouts at the time of the survey were no longer full time students and, therefore, had more time available for leisure activities. The academic status of the two groups of students (i.e., whether they were attending school or not at the time of the survey) may also affect the responses to items such as "reading books not required for college." However, it is possible that the findings may indicate initial differences in values and interests, which in turn may be related to the ability to survive in college. To clarify these points, additional data would have to be collected on leisure time activities at the time of admission to the program, while the students are still in the program, and after dropout or completion.

Feelings of Students' Parents and Neighbors About College Attendance

The great preponderance of students in the two groups (92% of survivors and 87% of dropouts) reported that their parents were proud of their college attendance. Although a slightly higher proportion of dropouts reported parental indifference or resentment, (8% of survivors, 13% of dropouts) this difference was not statistically significant.

With regard to the neighbors' feelings about the students college attendance, over half of the students in each group (56% of survivors, 66% of dropouts) felt that their neighbors were also proud. But the finding was more pronounced among dropouts, and 45 % of the survivors, as opposed to 35% of the dropouts, stated that their neighbors were indifferent or apathetic to their college attendance. Evidently, neighbors' opinions do not have much influence on college survival.

Section XII

IMPLICATIONS FOR PROGRAM AND RESEARCH

Recommendations for the Program

Recommendations for changes in the College Discovery Program, some of which have appeared in earlier reports[11], are listed below.

1. A Course in Community Resources

A relatively large number of respondents, especially dropouts, reported that personal and emotional problems impeded their ability to study and hindered their chances for success in college. In defining their personal difficulties, frequent references were made to family and social problems beyond the individual's control and, by implication, insurmountable even with the kind of help ordinarily provided by college counseling services. The services that seemed to be indicated for these complex problems were psychotherapy; family and marital counseling; assistance in securing employment, housing, recreational facilities; and financial help for themselves, their parents and siblings. Only with massive assistance of this sort could these students become free to pursue their academic careers with a minimum of conflicts.

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[11] Dispenzieri, Giniger, and Friedman, op. cit. p.7; Dispenzieri, A., Giniger, S., Tormes, Y.M., and Weinheimer, S., The College Discovery Program: A Synthesis of Research. The City University of New York Research and Evaluation Unit, March 18, 1969, pp. 60-64.

New York City has a large number of social and medical agencies which provide a wide range of services to individuals and families. Unfortunately, these facilities are not optimally utilized because the students are either unaware of their existence or do not perceive the direct applicability of the services to their own problems. Increasing the ability of College Discovery students to take advantage of existing community resources would, in the long run, be far more economical and feasible than trying to provide these services within the College Discovery Program. The drive and personal initiative that CDP students have shown in overcoming obstacles and entering college increases the likelihood that they will be accepted for services at social agencies.

A course in Community Resources should be provided, either during the first summer or the first semester, for all students who enter the College Discovery Program. This course, which might be developed in consultation with a School of Social Work, would acquaint students with the means of identifying problems and with the approaches to be used in securing appropriate help. Ideally, this help would be secured by the students acting on their own, without taxing the counseling services at the college. In addition, students would be in a better position to refer members of their families to the appropriate resources. Ultimately, the course would help in the dissemination of much-needed information within the communities.

While the initial establishment of the course would entail some expense, it would be economical in the long run since it would indirectly extend some of the benefits of the College Discovery Program to entire family units. It would also be a preliminary step in establishing a philosophy of helping whole families pull away from a poverty culture rather than alienating individual students from their families.

2. A Course in Study Habits

A repeated theme in the responses to the follow-up questionnaires was difficulty with study habits. Students generally felt that they were unprepared for the amount of studying necessary for success in academic work.

Although there were instances in which the underlying study problems were personal and emotional, or due to the lack of adequate facilities, for many students study problems reflected the lack of necessary skills and devices for effective and constructive use of time.

Students were generally aware of their need to improve study habits. An overwhelming number agreed with the statement that "a course in study habits should be given in the summer, prior to admission to regular classes." The course could provide tangible suggestions and actual practice in reading textbooks, taking lecture notes, reviewing for examinations, and tackling difficult subjects. It could also be used to assist students to understand and cope with the factors which generally act as deterrents to learning.

3. Exploration of New Instructional Methods

The College Discovery Program provides an excellent opportunity for testing innovative and imaginative approaches to compensatory education. The program could serve to introduce and validate new procedures and instructional devices, such as programmed instruction, teaching machines, and audio-visual equipment. These could be used to replace or supplement more conventional methods of remediation. Although no single system or technique has to date proven consistently superior to any other, a progressive outlook suggests that any approach grounded in a responsible remedial philosophy be given a fair trial.

4. Early Identification of Students' Needs and Deficiencies

Effective plans of action to assist students require early identification and definition of individual needs and deficiencies. The summer sessions could be utilized toward this end by introducing newly-designed or established diagnostic tests suitable for this type of population. Further, counselors should be encouraged whenever possible to participate in these evaluative activities during the summer program.

5. Greater Flexibility in Curriculum Planning For The Students

There is a strong possibility, considering these students' backgrounds, that greater freedom in curriculum choice might do much to sustain interest in remaining in college and scope of aspirations. Only when the student himself has reached a firm decision regarding his future career is he likely to tackle willingly the more difficult preparatory courses. The development of basic language and mathematical skills, however, should be mandatory for all students.

6. Use of Paraprofessionals Under Direct Supervision of Counselors And University Officials

Counselors are presently carrying too great a student load to permit sufficient individual contact with students. Many dropout students who obviously needed counseling did not keep in contact with the office to discuss their problems. It is felt that utilization of paraprofessionals will bring down the individual counselor's student load and enable him to take the initiative in reaching potential dropout students. Whenever possible, these paraprofessionals should be drawn from the pool of graduate students, particularly CDP graduates, or those who share backgrounds similar to the students'. Besides releasing time and energy of counselors to handle the more difficult problems, the use of paraprofessionals of backgrounds similar to the students' could also do much in eliminating the gap in communication which apparently exists between counselors and some students.

7. Daily Schedule of Tutoring Hours

To encourage utilization of tutoring services, a daily schedule of tutoring hours should be organized. This could be accomplished by providing a room where tutors would continuously provide assistance without appointment to College Discovery students in crucial subjects such as English composition and grammar, reading, mathematics, languages and history.

8. Additional Remedial Courses

Among the major recommendations for program changes suggested by students was the addition of more remedial courses in English composition and grammar, reading, mathematics, languages and history. Although reactions to the content of the summer session were generally favorable, students felt that they were not adequately prepared for their college work. Other research data, indicating that the preponderance of scores of CDP students is below the lower quartile in reading, substantiate the findings that students' deficiencies in basic skills and crucial subject matters are real.

Recommendations for Research

It was mentioned in the introductory chapter that the present study followed the same research procedures used for the follow-up study of the 1964 class of the College Discovery Program. The decision to follow the same research procedures was influenced by the knowledge that there were important differences in the two entering classes.

One difference concerned the ethnic distribution in the two groups. Both classes were made up largely of Negroes, Puerto Ricans, and U.S.-born whites, but there were fewer Negroes and more Puerto Ricans in the 1965 class than in 1964.[12]

The second difference was in admission requirements. In 1964, at least 14 of the 16 high school credits normally required for college admission were necessary for admission into the College Discovery Program. In 1965, it was felt that for college success academic deficiencies were more crucial in certain subjects than in others. The academic admission criterion, therefore, was changed to at least one year of college preparatory mathematics. No specific number of high school credits was required for admission.

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[12] Dispenzieri, Giniger, and Weinheimer, op. cit, p.14.

A third difference was the number of community colleges participating in the program. The students in the 1964 class were enrolled in only two schools: Bronx and Queensborough Community Colleges. In 1965, students were enrolled in five schools: Bronx, Queensborough, New York City, Kingsborough and Manhattan Community Colleges.

Another major, but less tangible, difference relates to the experiences of the program. Any experimental program requires a "shake-down" period before it settles into a normal operating procedure. The special services that constitute the backbone of the program and the overall administrative procedures are not immediately formalized. Novel procedures and radical changes are slowly introduced as experience and research are accumulated.

Thus, conditions at Bronx and Queensborough, the colleges with one year's experience, may have been quite different for the two classes. The three new colleges beginning the program for the first time in 1965 may have profited from the experiences of the other two colleges, and thus have avoided many pitfalls. Nevertheless, they are certain to have had problems of their own. Therefore, the experiences of the 1965 class in all five colleges were in many ways different from those of the 1964 class.

In spite of all the dissimilarities, the results of the two studies were remarkably similar, attesting to the reliability of the 1964 research findings. Briefly summarized, these results clustered around three major dimensions which apparently seem to be of great importance in predicting academic success:

1. The first dimension involves motivational problems. Many items differentiating dropouts from survivors seem to indicate that the dropouts are less motivated than the survivors to continue in CDP. This conclusion derives from the following findings in the two studies:

   ... Dropouts studied less than survivors

... Dropouts, in contrast to survivors, felt that they had too many interests outside of school, that they were not interested enough to do the needed studying; and that they were not getting enough out of college.

... The major reason for leaving CDP given by the 1965 class was "poor motivation and poor attitude toward college work." This reason was ranked second in importance among students in the 1964 class. Survivors on the other hand, attributed their staying in the program to "personal drive and perserverance."

2. The second dimension relates to the student's family life. Many dropouts from the 1964 class mentioned "family and personal problems" as one of the major reasons for leaving the program. A similar finding was obtained in this study. Other findings which suggest that the student's family life is an important dimension in determining whether or not he remains in school are that dropouts felt that problems and responsibilities in the home interfered with their school work, while survivors felt that family encourage-

ment was a factor which helped them to remain in the program.

3. The third dimension concerns the ability of the student to make use of available resources. Dropouts utilized fewer of the available program resources, such as tutoring and stipends, even though they were aware that these facilities existed.

Future research should be directed to further specification and elaboration of the three areas designated above. It should include small experimental studies to test some of the hypotheses advanced in the two follow-up surveys. The exploratory approach has uncovered information vital to the future direction of research. One of its important contributions has been to rule out areas which do not seem to have any relevance to the academic success of CDP students. For example, the failure of certain demographic variables and of student values to differentiate between dropouts and survivors suggest that these areas are not fruitful for future investigation and should therefore be abandoned. On the other hand, the family life of the student, an area which has received very little attention in studies of academic success among college populations, emerges as a crucial variable, possibly closely related to student motivational problems.

A study of the family life of the student could be directed to specify further the conditions under which the family interferes with the students' academic performance of his ability to remain in school. This would necessitate more specific identification of the nature of the problems confronting the student and his family from day to day; methods of coping with the problems; the emotional atmosphere in the home; the students' role in his family, as well as other objective structural variables, such as family size and degree of economic deprivation.

There is also a need to clarify why dropouts do not make use of available resources and when the motivational problems began, in particular, the study problems. Were the study problems present on admission, i.e., were these a carry-over from high school or did they develop throughout the students' college career?

Finally, there is a need for more specific delineation of the students characteristics on admission (e.g., academic deficiencies, basic skills, interest in college work, and other motivational and personality indices) and for descriptive studies of institutional policies which might affect student performance at each college, such as grading practices; retention policies regarding extracurricular activities and employment of students; the assignment of students to different curricula; the administration of the counseling, tutorial, and financial assistance services; and other college facilities to facilitate studying (e.g., library, study lounge) and to make the students' learning experience an enjoyable and satisfying one.

Future investigations should also attempt to control for the factors which have limited the present study. Obtaining information pertinent to research upon admission, repeated testing of students at different points in time, and a terminal interview would do much to clarify many of the points which presently tend to obscure the meaning of some of the findings.